THE

NAVAL MAGAZINE.

VOL. I. MARCH, 1836. No. 2.

TRAITS OF THE MUSSULMAN.

From "A Visit to Constantinople," a work in press, by the Author of "Ship and Shore."

LIKE the undisturbed quietude of his last sleep, is that life most coveted by the Osmanlie. He delights in a state of perfect quiescence; he loves to lounge upon his ottoman; sip his moca; trifle with his chibouque, and let the world without wrangle and rave as it may.

Whatever may be his vocation, this inertness of disposition is seldom overcome, or forced even into a temporary activity. If he is a merchant, and there are fifty customers at his counter, impatient to be served at the same moment, he will attend to them, one at a time, leisurely, as if there were but a single person there, and as indifferently as if it were of no interest to him whether that individual purchased any thing or not. If he is a mechanic—a cordwainer, for instance—he will drive the last peg in the heel of a boot, for which you may be waiting, just as deliberately as he took the first stitch; or, if he is a boatman, his oars will dip the wave just so many times in a minute, and no more, though your business may demand the most pressing haste; or, if he is a physician, and your child is dying, he will still finish his pipe, then perfume his beard, then direct respecting his dinner, and then with a slow, measured tread, walk forth in quest of his young patient, who, pro-

bably, ere this, is beyond the reach of human assistance.

These measured and indolent habits are so prominently characteristic of a Turkish town, that the stranger half persuades himself of his arrival in a community exempted, by some benevolent provision of nature, from the necessity of labor. He walks through the streets; they are all silent, save now and then the slow stroke of some smith's hammer, or the nodding blow of some carpenter comes upon his ear; but these sound as strange and out of place as the mattock of a sexton, breaking among old tombs the close mold for some new grave. He finds at the frequent coffee-houses, whatever may be the hour of the day, large and numerous groups of bearded men, sitting, slumbering, or smoking in the shaded courts, so composed, so wordless and still, that only the lulling note of the fountain prevails over the whisper of the light leaf above. And if he joins them—yielding to the infection of the quiet spot—he may be the better able, on his departure, to decide between the comparative merits of those, who, in his own land, assemble to exchange thoughts, and perhaps high words, and those who here meet to exchange sleepy, good-natured looks, with here and there a dissatisfied flea.

If he walks into the country, the same air of solitude and stillness prevails; not a ploughman's voice, nor huntsman's horn disturbs field or grove; the bird sings unmolested on its native tree; the green earth lies unfurrowed, and even untrod, save by the Tartar Janizary, who moves between one town and another, lonely as a ghost between its sepulchre and the deserted house where it once dwelt.

He returns to the city, looks about him again, finds that the inhabitants eat and drink as in other communities; asks whence they obtain their bread, meat, and fruits; is told they are brought from a distance; but observing as few evidences of capital as industry, he inquires for the means to purchase these; the Mussulman rolls up his eye, and says, "God is great!" This is the only reply his question wins, the only solution he can obtain for his perplexing problem; and he begins to think, in spite of Malthus, and every one else

who has written on political economy, that mankind might subsist without labor, or, at least, that one half the toil which now wearies the world, might be advantageously escaped. In this latter opinion he would not be so very erroneous; for if our wants were to be nicely and impartially examined, it would be found that a major part of them are artificial; and that neither their existence, nor gratification, is essentially promotive of our dignity, virtue, or happiness.

I was sketching, if my memory serves me rightly, the indolence of the Turkish character. This appears to pervade, with a leaden, listless effect, his whole being, like that deep drowsiness which overtakes the weary and exhausted. Yet he is capable, when a great emergency demands, of shaking it off, and of undergoing incredible fatigue and hardship. The man who, to-day, appears only equal to the task of moving his idle person from one lolling sofa to another, may perhaps to-morrow be seen mounted on his impatient charger, dashing through night and storm, over desert wastes, to meet an enemy, where the vigor of his right arm must cleave his way to victory. Or, if he has some private wrong to be redressed; if some object of personal revenge appeals to him; if the suspected person who profaned his harem has fled, he will pursue him over burning plains, through pathless forests, by the frowning precipice, and the darkened torrent, with an enduring, unwearied impetuosity of spirit, at which the very tempest might pause and wonder.

The capability of this great and sudden change shows that he is not the effeminate, enervated being that his calmer hours would indicate. It evinces also his temperance in those indulgences which undermine constitutional force; for excesses of this nature leave nothing upon which energy can rally and sustain itself: the man becomes like a piece of intricately organized machinery, with its main spring broken. A libertine squanders the summer and autumn of life while it is spring; and, with suicidal folly, digs a grave between himself and the only object, which, in his estimation, makes existence a blessing. One of the first fruits of his darling passion is this precipitancy, which makes him overleap his

own enjoyments; which makes the past with him a delirious dream, the future a blank; and which brings over him the chilling night of his days, while his morning star still sings upon its first watch.

But the Turk, notwithstanding the licentious sanctions of his creed, is yet comparatively temperate in his pleasures. He is cool and calculating in his indulgences. His noble constitution is a capital; he spends the interest freely, but will not encroach upon the principal. He is not, therefore, a sensualist, to the extent that many suppose, who draw their inferences from the polygamous features of his social condition. The Koran allows him all the variety to be found in a four-fold state of wedlock; but he very seldom avails himself of this quaternary indulgence. His means may not permit it; or his affection for one already his own, may render him indifferent; or if he has married into a powerful family, the fear of giving offence, and thus forfeiting an expected inheritance, or defeating some scheme of personal preferment, restrains him; so that with all these restricting agencies, and the politic suggestions of a passion that seeks to preserve its strength, he may not, perhaps, be as much given to excess as many who live under a system less latitudinarian in its matrimonial and moral code.

The character of the Turk is like his own beloved Stamboul—a mass of singular incongruities. There is scarcely one feature of a meek or gorgeous beauty that is not approached by some counteracting deformity. He loves and venerates his mother, and strangles his wife upon a whisper of jealousy. He tolerates you in the exercise of your religion, and bowstrings a convert from his own; he is magnanimous in the forgiveness of one enemy, and implacable in the persecution of another equally deserving his generosity; he loves his children when young, and forgets them when they have grown up. He relieves a stranger in distress, and turns a deaf ear to a brother in misfortune; he washes his hands, kneels, and prays, and then, like Pilate, delivers up the innocent. He plunders a province, and then goes on a pious pilgrimage to Mecca; he liberates a caged bird, and dungeons a human being; he is honest and upright in

the bazar, and a deep dissembler in the divan; he is a republican in private life, and a despot in power; submissive to those above him, and arbitrary to those beneath; he kisses his death sentence, and charges his very bones to rumble their remonstrance in the grave. He is temperate in the indulgence of his appetites, and yet lives mainly for their gratification; he believes in destiny, and yet beheads a general who has lost a battle, or an admiral who has been driven by a tempest on the rocks. He believes in amulets, charms, and the fascinations of the evil eye, and stoically puts on the apparel of one who has died with the plague; he prides himself on the stateliness of his person, the dignity of his carriage, the taciturnity of his lips, and then goes to the deformity of a natural cripple for medical counsel, and the battology of an idiot for the divination of his dreams.

Such are a few of the incongruities which disfigure the character of the Mussulman; and they are mainly traceable to defects in his social and moral condition. He lives under an economy of accident, caprice, and blind impulse. There is no enlightened conviction, no paramount obligation, no philosophical test, no pure and lofty principle—such as the Bible furnishes—restraining, elevating, and binding into one harmonious whole the wishes, resolves, and conduct of the man. He is like a ship at sea, without an indicating shore, without a polar magnet, and holding her course by the fickle light of every wandering star. Such will ever be the condition of individuals and nations, where the Bible does not shed its pure and constant light. The past is an evidence of the future. Greece banished and recalled, murdered and immortalized her best sons. She reverenced the dictates of philosophy, and obeyed the impulses of vanity; she disdained the protection of foreign alliances, and neglected to preserve a systematic organization of her own strength; she despised the power of her ruthless invaders, till they were already trampling on her shrines; and then rose, like one in a dying delirium, only to betray her desperation and despair. Rome decreed her victors a triumphal arch today, exile or death to-morrow. She execrated tyranny with her lips, and wove with her own hands the shroud of

her liberties. She plundered the world of its dearest treasures, and then like the huntsman going to the jungle of the cubless tigress, proposed terms of perpetual amity. She fluctuated between her own duty and valor, and the fidelity of the mercenary—between the stern obligations of patriotism, and the suggestions of effeminate ease, till she found too late that her sceptre had departed, and even the possibility of retrieving her errors gone for ever! And the Ottoman power by the same fickleness, blindness, and passion, is now falling in ruins. It has not the harmony, the inherent energy, or auxiliary aid that can long preserve it from dissolution. It is like an enormous raft afloat, upon troubled waters, and fastened by ligaments too slender, much longer to hold together its tossing and wrenching parts. It will fall asunder, and Russia will be the strong flood-man to gather up the drifting spoil.

The present feeble and distracted condition of the Turkish empire has not resulted, as many have been led to suppose, from the sudden destruction of the Janizaries. Had that body retained the patriotism and vigor which once animated and nerved them, their absence might truly be deplored by every honest Osmanlie. But they had ceased to possess these commendable attributes; they had become insolent and refractory—a terror to the throne, and to the hearth of the quiet citizen. Yet there was an unsparing precipitancy in their fate, that must awaken sentiments of commiseration. Nor can we help feeling a bewildering respect for the daring and defying spirit that flashed through their despair.

They had long stood the firm refuge and defence of the empire; they had impressed the terror of their arms upon the dynasties of Christendom; they had won a thousand victories, and as often dictated the conditions of peace; they had displaced viziers, deposed sultans, and set aside the pashas of the provinces at will; they had recently consigned Selim to a bloody shroud, and given the present monarch to understand, that he owed his inviolability to the simple fact of his being the last of the Othman line of an age sufficient to reign. Occupying this position, and sustained

by these proud recollections, they were naturally intolerant of any innovations that infringed upon their privileges, or diminished their consideration. Mahmoud saw clearly that he must raise the quick hand of ruin against them, while he had the power, or submit to become the passive instrument of their caprice. He preferred his own life and independence to their domineering sway; and planned their destruction with a true Machiavelian policy.

He thinned their ranks by sending them, in small detachments, into the Morea—expeditions in which they were intentionally unsupported, and from which they never returned. To the remainder he addressed himself in a different form. To the avaricious, he proffered gold; to the ambitious, preferment; to the refractory, he gave the bowstring; till, by these well-adapted devices, the commander-in-chief, and a number of the master spirits of the order, were brought firmly into his interests. The fetva for the organization of a new and distinct army, now made its appearance; and produced the expected result. The Janizaries instantly rose against it, denouncing the spirit of its provisions, and demanding the heads of those who had counselled their sovereign to this disrespectful act; and threatening, in the event of its not being immediately rescinded, to force the gates of the seraglio.

But Mahmoud was prepared for this alarming issue. The forces, which he had been secretly collecting, in anticipation of this event, now surrounded the Etmeidan, in which the Janizaries were assembled. An order for the death of the insurgents, under the sanction of Ulema, was issued; the standard of the Prophet unfurled from the dome of the imperial mosque, and all faithful Mussulmen called upon to support its sacred cause against the violence of impiety and treason. The Janizaries soon saw that their condition was hopeless, their mistake irretrievable; yet they determined not to disgrace the memory of their fathers by any relenting tears, or unavailing supplications. They forced their way over many of their dead companions to their barracks, where they shut themselves up, sternly resolved to abide the terrible issue. From this retreat they could not be forced;

and at evening, orders were given to fire their last refuge. The burning pile sent up its fitful flashes through the long night; and the next sun dawned upon a smouldering mass of embers, bones, and blood! Those who had escaped the tumult and carnage of the Etmeidan, were hunted down in every section, street, and alley of the city. They were betrayed, overwhelmed, cut to pieces; and their mangled bodies cast into the Bosphorus, till that mighty current became literally choked with the dead!

Thus perished in a day one of the most formidable orders of men known to this, or any other age. Their achievments are interwoven with the highest splendors of the Ottoman name. Their watch-fires were kindled from the mountains of Asia to the centre of Europe; and their war-song seems still to echo from every torrent and steep. Their chivalric valor, their unshrinking hardihood, and contempt of death, will long disturb the sober pen of history, and furnish themes, around which the spirit of poetry will hover, and catch the romance of its wildest flights.

The more sanguine among those who joined in anathematizing and overwhelming the Janizaries, believed that their absence would diminish the system of corruption, that had begun to assume an alarming aspect, in every department of the government. But these expectations have proved illusory. Injustice, venality, and extortion, have never been more rife than at present. There is not an office in any branch of the administration, from that of Grand Vizier down to that of the most petty chouash, which may not be purchased; and when thus obtained, be converted into an instrument of oppression and fraud. Nor does the monarch encounter any considerable risk of loss in this universal auction of places; for if the incumbent fails to meet his contract, it is an easy thing to send him the bowstring; or, if he is able by grinding the face of the poor, to liquidate the exorbitant obligation, it is equally the interest of the Sultan to strangle him into heaven, and sell his place to another, who is to pay for it like his predecessor, with his gold and his blood. Yet even on these terms there is no want of bidders. Hundreds of the highest talents and deepest sagacity

in the realm, aspire to the situation of vizier, though this office is worth but three years and a half of life, that being the average time between the instalment of the aspirant, and his violent death. In Turkey, at least, the path of ambition lies up a perilous steep; he who climbs is sure to fall—if not in gaining the elevation—yet in his first look from the summit.

The whole revenue of the state is secured upon a system of legalized oppression. Every agent of the government, civil and military, retains his situation by his capacity at intrigue and extortion. He systematically plunders those beneath him, to bribe those above. This system of violence and fraud has reduced the fairest portions of the Ottoman dominion to barren wastes. It has withered agricultural enterprise, and driven the hopeless husbandman in despair from his fields. It has made the village, that once thronged with a busy and happy population, a ruin and a grave-yard. It has left to hills and valleys that once rang with the song of the corn-reaper, only the flapping wing of the owl, and the desolate cry of the hyena. The pilgrim pauses on his solitary way, and doubts if man ever dwelt there; but the remains of a cypress grove, still gloomily guarding the dead, tell him that his foot presses a sod once trodden by thousands more cheerful and contented than himself. Such are the fruits of tyranny; such the results of a despotism established by conquest, and upheld by cruelty and corruption; such the condition of a nation whose leaders blind themselves and their subjects to the loftier light and influences of the age—who suspend civilization, arrest the human mind, and seek to repose, in self-complacent stupidity, upon the summit of their power.

There was a time when the present Sultan might have essentially ameliorated the condition of his subjects. The destruction of the Janizaries left him at liberty to prosecute those wholesome and efficient measures of reform in which the wise and benevolent Selim perished. But Mahmoud is evidently deficient in the higher and nobler qualities which befit a sovereign. He is, seemingly, incapable of comprehending, with vivid force, the real position, interests, and

resources of his vast dominion; and much less is he capable of moulding its temper and energies to the spirit of the times. His policy is far behind the age in which he lives, and immeasurably short of the exigencies which now press upon his distracted councils. His reforms, if they are worthy of the name, have effected little more than a partial and obnoxious change of costume. He has been shaping the shadow instead of the substance—has disguised the hectic flush of the patient, instead of eradicating the vital disease. It is of no moment whether a man fights beneath a turban, or a helmet—whether his standard be the soup kettle of the Janizary, or the more graceful folds of the waving banner. The speed, or distance of the ball, is not determined by the exterior polish or rudeness of the ordnance. The genius and habits of a people are not revolutionized by any change in the drapery that conceals their person. The moral and intellectual qualities of a nation may remain unaltered, through every variation of costume, from the effeminate robes of a Persian prince, to the blanket and moccasin of the American savage.

The capital error of Mahmoud has been, in directing his reforms to the garb and outward conduct of his subject—the great fountain of character and action has remained untouched. This source of sentiment and impulse is beyond his sagacity; his magical wand cannot reach it. He may chase away the spectre that hovers about the grave, but he cannot go down and tranquillize the disturbed sleep of the pale occupant. The lights of science, and influences of education, which alone can change the character of a people, have only flitted across his dreams. They have never entered vitally and deeply into any plan that he has proposed, or formed even an essential appendage to that system which he has pursued with an indiscriminate, unrelenting rigor. His great scheme appears to have embraced but little beyond the consolidation of an absolute, unrelieved despotism. And it is a singular fact, that just in proportion as he has lowered the rights and liberties of his subjects, he has descended himself, in the awe, respect, and fear of foreign princes. Tyranny, in an enlightened age, carries down the oppressor and the oppressed.

The day has passed, when the blind dictates of irresponsible power can be rendered palatable, even to the Mussulman. He begins to ponder over the absolute tone in which he is addressed from the imperial pavilion; and he will, ere long, begin to question the authority under which the Capijee acts, before he permits his head to roll from his shoulders, like an idle top from the hand of youth. But when he once begins to respect himself, and dares to assert the rights instinctive in a rational and responsible being, consequences of indescribable magnitude must follow. He is not the tame and submissive being that easily retraces a step once taken; or overlooks an irreparable wrong, that the impenitent offender may have an opportunity of repeating the enormity. When he has once risen in defence of his lofty and aggrieved nature, no threats, perils, or tortures, will be able to break his resolution, or drive him from his purpose. He will stand, if surrounded and overmastered, unshrinkingly, as an Indian chief among his tormentors, leaving no recanting word, or look, to dim his stern memory.

Not only will the tyranny that weighs him down, be shaken off, but with it must pass the onerous chain of ecclesiastical authority. The sanctions and obligations of his religion are indissolubly connected with temporal power; this is the root from which they derive their life. This power has never existed but in an absolute form; it can accommodate itself to no other mode of being; its very genius is to be supreme and irresponsible—so that the same effort which lifts the Mussulman above the broken fetters of his despotism, will place him on the ruins of his religion. The sceptre and crescent, altar and throne, will sink together. It would not, perhaps, be a matter of regret, were this catastrophe to occur without delay. For out of this chaos, some new system might perhaps emerge, in which the rights of human nature would be respected, and the precepts of Christianity not wholly forgotten. Islamism is the grave of inspired truth and liberty.

O'CONNELL IN CORK.

A rough Sketch from the Note-Book of a Traveller.

On reaching the main street of the city, I found 'Misthur O'Connell' sweeping along, followed by a ragged crew of rent-payers, who were rending the air with hosannahs to his name. Though he seemed to enjoy this incense and oblation, by the gracious mode in which he ever and anon lifted his green cap, I could not help thinking, that, to be thus attended, could not be very agreeable to a taste at all fastidious, and that the great beggar-man had sold himself to a beggarly master.

At length the hour of dinner, fixed at six o'clock, came round, and having prepared my costume, as if for a private entertainment, supposing that no other would be in rule, I went to the Commercial Rooms, the appointed scene of festivity. The company had already begun to assemble, and soon after, a tremendous uproar in the street, the corridor, and presently after, in the room of assembling, announced the arrival of the Agitator. He made his appearance in a blue frock coat, with a black handkerchief tied carelessly round his neck, so as to permit his collar to be seen on one side, while it was entirely suppressed on the other. His wig, however, with the adjustment of which he doubtless had less to do, was well dressed and glossy; and his full, plump, beardless, and shining face was lit up with an expression of mirthfulness and good humor, as he turned to salute his friends with cordial familiarity, calling many of them by their Christian names. A murmur of admiration at his appearance, so full of promise of long years of agitation to come, ran round the room—"how big he is!" "how well he looks!" "the stoutest man in the room!" "I never saw him look better!"

After an awful pause of an hour, the band at length struck up 'Erin go Brah;' and the Liberator was marshalled onward, a slight rush taking place immediately behind him

for precedence, until a cry of admonition from one of the managers, at once restored order, and a party of near three hundred passed quietly on, and took their seats with great decorum. The room was large, with a vaulted roof, and well lighted by means of chandeliers. At the farthest end was a cross table, elevated on a platform, and at right angles, three rows of tables extended the whole length of the floor. Toward the centre of the cross table, the Liberator was seated between the two members for Cork, one of whom presided; and I was not a little pleased to find, on taking my seat quite near the post of honor, that the tables were groaning under a very substantial repast, which, in this respect, compared most advantageously with the more exclusively intellectual banquet, at which I had assisted, a few months before, in the Scottish capital, in honor of the noble Earl Grey. There was turtle soup, esteemed a delicacy here, abundance of port and sherry, and tickets at each plate for claret, to be brought and uncorked as required, after the removal of the cloth. And it is worthy of remark, that the manners of this assembly of Irish radicals contrasted very favorably with those of their intellectual fellow-subjects of the modern Athens, brought together by the Whig celebration, for the entertainment of nobility.

When the cloth was removed, and the People, the King, and the other customary toasts had been drunk, the health of the Liberator was introduced, with ample encomium, and received with deafening applause. He rose from his seat, and began in a low, soft tone, yet most distinctly audible, to say, that, among the delusions of self-love, none was more common than that which would lead the humble, yet zealous advocate of any cause that interested the feelings and hearts of the people, to receive as an homage to himself that applause which had its origin in a far nobler enthusiasm. Aware of this delusion, while he felt honored in being the occasion of calling up such a burst of enthusiasm, he would not ascribe it to any feeling less elevated than an ardent love for Ireland.

Having thus commenced, he went on with a flow of eloquence which seemed to rise without effort to his

lips, sometimes well reasoned, occasionally painfully pathetic, in the next moment ludicrous, and presently beautifully poetic. His gestures were not graceful, but they were natural and unstudied. Restless, and perpetually in motion, he seemed to throw himself, with his whole strength of body, as well as soul, into every thing that he was saying. Sometimes he supported both hands by the collar of his coat, or occupied one, in taking up and throwing down his handkerchief on the table. Occasionally, the right was thrust into his breast; then his arms were folded, and he stood erect, as, with towering form, he seemed to set at defiance the enemies of Ireland.

All his gestures, if ungraceful in themselves, were perfectly spontaneous, and seemed in some way to connect themselves with the expressions of his various sentiments. In like manner, the expression of his countenance, and the tone of his voice, adapted themselves with wonderful versatility to what he was saying, as, with a bewitching smile, and soft, low voice, he drew a picture of the domestic happiness and comfort which he would fain see the lot of every Irishman, or, changing suddenly into a bland, insinuating, Iago-like manner, he alluded to the recreant O'Croly, the parish priest, who in a late publication had, in urging a national provision for the Catholic clergy, made some strange revelations concerning their present mode of existence, and alluded disrespectfully to the practices of the Agitator, who now denounced him in turn, with a withering scorn of detestation, as, in eulogizing the priesthood of Ireland, he deplored the existence of exceptions "of some men of all religions, yet of no religion—some Judas Iscariot, bargaining, with scribes and pharisees, for the sale of his master!" Throughout the whole of this declamation he went on in a low voice, without stopping to take breath, his face expressive, the whole time, of scorn and hatred, as he revolved his head slowly from side to side, the withering words coming forth as if he himself knew not what was to be next uttered, yet each sentence ending beautifully and pointedly.

Nothing could be more touching to the audience to which it was addressed, than the mournful air in which he

deplored the evils that had resulted to Ireland from the disastrous Union. "When I came into the world, Ireland was yet a nation, and we had a flag to rally round. Now we have no symbol to cheer us onward—no star of promise on which to fix our eyes, no beacon of any sort, save only the rainbow which is created before us, by the aspirations of our hopes!" It was the fine acting of Talma, prompted by inspirations from within, instead of being quickened into energy by the genius of others. His speech abounded, indeed, in passages of surpassing eloquence, which lost all their beauty in the hands of the vile reporters, or rather *reporthers*—for they are not worthy to be called by the same name with the same clever class in England.

There is, indeed, as I had afterwards occasion to be still more strongly convinced of in Dublin, no orator who suffers more in being reported than O'Connell. The eloquence that is in his air, his manner, the tone and modulations of his mellow and changing voice, is, of course, lost entirely; and many of his ideas are altogether missed, or at any rate, are stripped of his language and arrangement. Still his speeches, as we read them, caught as best they may be, while so rapidly uttered, are often full of eloquence, and capable of stirring up a wonderful enthusiasm among the people whose cause he advocates. They are always better than his written productions, deliberately set down: for, instead of gaining, by the opportunity for reflection—for deliberation on the choice of words, and more logical arrangement of language and ideas—which deliberate composition affords, he loses in the closet that fervor and excited enthusiasm, derived from a crowded assemblage of sympathizing listeners, cheering him onward, as he soars to the highest flights of which his genius is capable.

It is, precisely, because the Agitator finds little sympathy, and receives less applause, in the House of Commons—where the wild extravagance of his genius and the unmeasured character of his insolent and vulgar vituperations are checked—that he is so much less eloquent there, than in those popular assemblies of his own countrymen, where no misgivings as to the integrity and honor of their Liberator, or doubts of the

veracity of his assertions, disturb the confidence of a people of equal proneness to assert and to believe what is marvellous, and where the hearts of his audience respond to each pulsation of his own.

HISTORY OF NAVIGATION.

By E. C. Ward, Esq. Professor of Mathematics in the U. S. Navy.

[Continued.]

IN 1581, Michael Coignet, a native of Antwerp, published a treatise in which he animadverted on Medina, and showed that as the Rhumbs are spirals, making endless revolutions about the poles, numerous errors must arise from their being represented by straight lines, on sea charts. Though he hoped to find a remedy for these errors, he was of opinion that the proposals of Nonius were scarcely practicable, and therefore, in a great measure useless. In treating of the sun's declination, he took notice of the gradual decrease in the obliquity of the ecliptic; also gave a description of the cross-staff, with three transverse pieces, which he said was then in common use among sailors. Some nautical instruments, now all laid aside, also were invented by him.

The same year the discovery of the *dipping needle* was made by Robert Forman. In his publication on this subject, he maintains, in opposition to Cortes, that the variation of the compass was caused by some point on the surface of the earth, and not in the heavens; and considerable improvements, in the construction of the compass itself, were made by him. To this work of Forman's, is always prefixed a discourse on the variation of the magnetic needle, by William Burrough, in which he shows how to determine the variation in many different ways. Many errors, in the practice of navigation at that time, are pointed out by him; and he speaks in very severe terms of those who had written on the subject.

In 1585, an excellent compendium on navigation was published by Roderic Zamorano, which contributed greatly towards the improvement of the art, particularly in sea-charts. Globes of an improved kind, and of a much larger size than those formerly used, were now constructed, and many improvements made in various instruments. The plane chart however continued still to be used, though its errors were frequently complained of.

Methods of removing these errors were much sought after; and Gerard Mercator seems to be the first who achieved this in a manner to answer the purposes of seamen. His method was to represent the parallels both of latitude and longitude, by straight lines, but gradually to augment the former as they approached the pole. Thus the rhumbs, which otherwise ought to be curves, were now also extended into straight lines; and thus a straight line drawn between any two places marked on the chart, would make an angle with the meridians, expressing the rhumb leading from the one to the other. But though, in 1569, Mercator published an universal map constructed in this manner, it does not appear that he was acquainted with the principles on which this proceeded; and it is now generally believed that the true principles on which the construction of what is called Mercator's Chart depends, were first discovered by Edward Wright, an Englishman.

Mr. Wright supposes, but without sufficient grounds, that this enlargement of the degrees of latitude was known and mentioned by Ptolemy, and that the same thing had also been spoken of by Cortes. The expressions of Ptolemy, alluded to, relate indeed to the proportion between the distances of the parallels and meridians; but instead of proposing any gradual enlargement of the parallels of latitude, in a general chart, he speaks only of particular maps; and advises not to confine a system of such maps to one and the same scale, but to plan them out by a different measure, as occasion might require; only with this precaution, that the degrees of longitude in each should bear some proportion to those of latitude; and this proportion is to be deduced from that which the magnitude of the respective parallels bears to

a great circle of the sphere. He adds, that in particular maps, if this proportion be observed with regard to the middle parallel, the inconvenience will not be great, though the meridians should be straight lines, parallel to each other. By this, he only means, that the maps should, in some measure, represent the figures of the countries for which they are drawn. In this sense, Mercator, who drew maps for Ptolemy's tables, understood him; thinking it, however, an improvement not to regulate the meridian by one parallel, but by two; one distant from the northern, the other from the southern extremity of the map, by a fourth part of the whole depth; by which means, in his maps, though the meridians are straight lines, yet they are generally drawn inclining to each other towards the poles. With regard to Cortes, he speaks only of the number of degrees of latitude, and not of the extent of them. He even gives directions that they should all be laid down by equal measurement, on a scale of leagues adapted to the map.

For some time after the appearance of Mercator's map, it was not rightly understood; and was even thought to be entirely useless, if not detrimental. However, about 1592, its utility began to be perceived; and seven years after, Mr. Wright printed his famous treatise, entitled, "*The correction of certain errors in Navigation*," in which he fully explained the reason of extending the length of the parallels of latitude, and the uses of it in navigation. In 1610, a second edition of this work was published, with improvements. An excellent method was proposed of determining the magnitude of the earth. He also published a description of an instrument which he called the *Sea-rings;* and by which the variation of the compass, the altitude of the sun, and the time of the day may be readily determined at once in any place, provided the latitude be known. He showed also how to correct the errors arising from the eccentricity of the eye, in observing with the cross staff; made a total amendment in the tables of the declinations, and of the sun and stars, from his own observations, with a six feet quadrant, in the years 1594, 95, 96, and 97; and constructed a sea quadrant to take altitudes by a fore or back observation, with a contrivance, also,

for readily finding the latitude by the height of the pole star, when not on the meridian. To this edition was subjoined a translation of Zamorano's Compendium before mentioned, in which he corrected some mistakes in the original, adding a large table of the variation of the compass, observed in different parts of the world, to show that it was not occasioned by any magnetic pole.

These improvements soon became generally known. In 1608, a treatise, entitled "*Hypomnemata Mathematica*," was published by Simon Stevin, for the use of Prince Maurice. In the part relating to navigation, the author having treated of sailing on a great circle, and shown how to draw the rhumbs on a globe mechanically, sets down Wright's two tables of latitude and of rhumbs, in order to describe these lines more accurately—pretending even to have discovered an error in Wright's table. But all Stevin's objections were fully answered by the author himself, who showed that they arose from the imperfect way of calculating made use of by the former.

In 1624, the learned Wellebrord Snell, professor of mathematics at Leyden, published a treatise of navigation on Wright's plan, but somewhat obscurely; and as he did not particularly mention all the discoveries of Wright, the latter was thought by some to have taken the hint of all his discoveries from Snell. This supposition, however, was long ago refuted; and Wright enjoys the honor of the discoveries so justly his due.

Mr. Wright having shown how to find the place of a ship on his chart, observed, that the same might be discovered more accurately by calculation; but considering, as he says, that the latitudes, and especially the courses at sea, could not be determined so precisely, he did not set down particular examples, since the mariner may be allowed to save himself this trouble, and only mark out upon his chart the ship's way, after the manner then usually practised. However, in 1614, Raphe Haudson, among his *nautical questions*, subjoined to a translation of Pittiscus's Trigonometry, solved very distinctly every case of navigation, by

applying arithmetical calculations to Wright's table of latitudes, or of meridional parts, as it has since been called.

Though the method discovered by Wright, for finding the change of longitude by a ship sailing on a rhumb, is the proper way of performing it, Haudson proposes two ways of approximation to it without the assistance of Wright's division of the meridian line. The first was computed by the arithmetical mean between the cosines of both latitudes; the other by the same mean between the secants, as an alternate, when Wright's book was not at hand—though this latter is wider from the truth than the former. By the same calculations also, he showed how much each of these compendiums deviates from the truth, and also how widely the computations on the erroneous principles of the plane chart differ from all of them. The method generally used by navigators at the present day, is commonly called *middle latitude* sailing; which, though it errs more than that by the arithmetical mean between the two cosines, is preferred, on account of its being less operose; yet in high latitudes it is more eligible to use that of the arithmetical mean between the logarithmic cosines, equivalent to the geometrical mean between the cosines themselves; a method since proposed by Mr. John Bassat. The computation by the middle latitude will always fall short of the true change of longitude; but that by the arithmetical mean falls short in latitudes above 45°, and exceeds in lesser latitudes. However, none of these methods will differ much from the truth, when the change of latitude is small, as in a day's work.

About this time *logarithms* were invented by John Napier, baron of Merchiston, in Scotland, and proved of the utmost service to the art of navigation. They were first applied by Edward Gunter in 1620. He constructed a table of artificial sines and tangents to every minute of the quadrant. These were applied according to Wright's table of meridional parts, and have been found extremely useful in other branches of the mathematics. He contrived also a most excellent ruler, commonly called Gunter's scale, on which were inscribed the logarithmic lines for numbers, and

for sines and tangents of arches. The sector likewise was greatly improved by him for the same purposes; he showed also how to take a back observation by the cross staff, whereby the error arising from the eccentricity of the eye is avoided.

Another instrument of his own invention, is described by him, called the *cross-bow*, for taking altitudes of the sun or stars, with some contrivances for the more ready collecting the latitude from the observation. The discoveries concerning the logarithms were carried to France in 1624, by Edmund Wingate, who published two small tracts in that year at Paris. In one of these he taught the use of Gunter's scale; and in the other, of the tables of artificial sines and tangents, as modelled to Napier's last form, erroneously attributed by Wingate to Briggs.

Gunter's ruler was projected into a circular arch by the Rev. William Oughtred in 1633, and its uses fully shown in a pamphlet entitled, "*The circles of Proportion;*" where, in an appendix, are well handled several important points in navigation. It has also been made in the form of a sliding ruler.

The logarithmic tables were first applied to the different cases of sailing by Thomas Addison, in his treatise entitled, "*Arithmetical Navigation*," printed in 1625, in which he gives two traverse tables, with their uses; the one to quarter points of the compass, the other to degrees.

Henry Gellibrand published in 1635 his discovery of the changes of the variation of the compass in a small quarto pamphlet, entitled, "*A Discourse Mathematical, on the Variation of the Magnetical Needle.*" This extraordinary phenomenon he found out by comparing the observations made at different times near the same place, by Mr. Burrough, Mr. Gunter, and himself—all persons of great skill and experience in these matters. This discovery was soon known abroad; for F. Athanasius Kircher, in his treatise, entitled, "*Magnes*," first printed at Rome, in 1641, informs us, that he had been told it by John Greaves; and then gives a letter of the famous Marinus Mersennus, containing a very distinct account of it.

[To be continued.]

WATER SPOUTS.

By Lieut. H. W. Ogden, of the U. S. Navy.—Originally written for Silliman's "Journal of Science."

DEAR SIR,—At the suggestion of several of my friends, with whom I have lately conversed on the subject of that singular, and as yet unexplained phenomenon the water spout, I take the liberty of sending, for your consideration, a short account of the appearance of several of them, which once surrounded our ship at the same time, giving us, from their proximity, a better opportunity of observing them than is generally had.

In May, 1820, while on our passage from Havana to Norfolk, in the U. S. sloop of war John Adams, we had reached the latitude of Cape Fear, and were near the inner edge of the gulf stream, when the wind died away, the weather became very warm, and the atmosphere close and oppressive. The crew were lounging listlessly about the deck, dreading the dull monotony of a continued calm, when one of the seamen called out, that there was a water spout on the larboard bow.

The officers immediatly rushed up from below, and I among the number; but we had scarcely reached the deck before a second and a third were seen, and within half an hour, there were seven around us, varying, in their distance from the ship, from two hundred yards to two miles.

The atmosphere was filled with low ashy-colored clouds, some of which were darker underneath than others; and from these the water spouts were generally formed, each one from a separate cloud. In some instances, they were perfectly formed before we observed them; but in others, we could see a small portion of the cloud, at first extend downwards in the shape of an inverted cone, and then continue to descend, not very rapidly, until it reached the water. In other instances, however, we observed that this conical appearance of a portion of the cloud did not always result in the perfect formation of a water spout. Several times we

saw the cone project—continue for a short time stationary—then rise again slowly and disappear in the clouds. This would in some cases occur two or three times to the same cloud; but eventually a larger and darker cone would descend, and result in forming the visible spout as above mentioned.

We saw so many of these failures, that the eye very soon became accustomed to that degree of density in the cone which would ensure its descent, and even the sailors became practical philosophers for the time, correctly predicting when a spout would be formed, and when it would fail.

While intently watching these various operations, we observed that the nearest water spout, then about two hundred yards on our starboard quarter, was moving slowly towards the ship with a light air from the eastward. The captain immediately ordered the topsails to be clewed down, the hatches to be covered with tarpaulins and battened, the crew to be sent under deck, and directed some of the marines to be in readiness with loaded muskets to try what effect might be produced by the concussion of firing, as it is the general belief that water spouts may be broken by this means. As soon as it was near enough, the marines were ordered to fire, and although many of the balls must have passed directly through it, neither the perforation, nor concussion had the slightest effect on it. The marines were ordered to load and fire again, and in the mean time I was directed to cast loose one of the thirty-two pounders. I did so, and took aim directly at the base of the spout, then within sixty yards, and fired. The captain, and others who were watching the effect to be produced, said, they distinctly saw the ball strike the spout at its base, dashing the water on either side, but still it remained as perfect as before. I was ordered to load and fire again, and to elevate the gun so as to strike the tube as high as possible, but just as I was in the act of pulling the lock spring, the captain looked aloft, and observing the head of the spout directly over the main truck, called out to me to hold on, not wishing to try farther experiments while it was in such dangerous proximity to the ship. For some minutes I had been too much occupied with the gun to notice, particularly, the position and progress of the water spout; but

now, on looking up, I saw the dense black cloud, from which it was formed, hanging immediately over us, at a height, as nearly as I could judge, of between three and four hundred feet, and the upper part of the spout directly over the mast heads. When at a distance of two hundred yards, the tube of the spout seemed to fall perpendicularly from the cloud to which it was attached; but, as it approached, the cloud alone moved steadily on, while the lower part of the tube, as though it found something repulsive in the ship, diverged slowly to the south-west, and passed the stern at a distance of about sixty yards.

This, however, was no doubt caused by a difference in the current of air above and below, as I observed that some of the others, more distant from the ship, would occasionally vary from a perpendicular line and then resume it.

While the spout was thus moving slowly by us, we had a good opportunity of observing it attentively; and, as we were well convinced that it was not to be broken, or dispersed by the concussion of firing, the gun was secured.

Around the base of the spout, for several feet, the sea was considerably agitated, and a few feet above, a gyratory motion was very distinct, tending upward, and accompanied by a whizzing noise, something like that made by a small quantity of steam, escaping through a valve, which is not very tight.

The tube of the spout was apparently four or five feet in diameter, and its surface well defined. Its color was light and misty, but we observed that they all looked darker at a distance, than when close to us. Its shape was somewhat like a trumpet—the small end downwards, and spreading out suddenly as it united with the cloud. At a height of between twenty and thirty feet from the water, a number of sea-birds were flying around it, evidently in quest of food. They were in rapid motion, flitting and crossing each other's paths at every moment, darting in towards the tube, wheeling away, and then as hastily returning. In the mean time, the cloud above, which had rapidly grown denser and larger, began to exhibit coruscations of electricity. The spout which had passed off to a distance of about three hundred yards,

after having been visible more than twenty minutes, became smaller at its lower part, and then gradually rose until entirely lost in the cloud, part of which still hung over us. Soon after this, several severe flashes of lightning struck near to the ship, and the rain began to fall in large and very cold drops. Some of the sailors, who believed that the water was taken up in a body to the clouds, tasted the rain as it fell on the deck, and were very much astonished to find it perfectly fresh. A light breeze now sprang up, bearing the cloud off to the westward, which, as it passed on, assumed the appearance of a heavy squall, and from its accelerated motion, it was evidently carried forward by a strong wind.

In another instance, on board the same ship, we were one day sailing with a light breeze from the westward, all sail set, and the weather mild and pleasant. Light fleecy clouds were, occasionally, passing over the ship, but unattended by any increase of wind. I was officer of the deck, at the time, and my attention was attracted to one of the clouds, which was somewhat lower than the others, but it also passed over, without the slightest change, in the strength of the breeze. It very soon, however, began to grow darker, and in a few moments I observed the formation of an inverted cone on its lower edge, and a slight agitation of the sea directly under it. The cone continued gradually to descend, until it joined with the agitated point beneath—thus rendering the whole length of the spout visible. It was, at this time, about a cable's length on the lee quarter. The cloud continued to increase, until as large as those which produce the ordinary squalls met with at sea, and soon after the spout disappeared, the lightning began to flash, and the rain to fall so heavily, as entirely to obscure a brig, about eight miles to leeward of us. In a few minutes, the cloud passed over her, and when she reappeared, we saw that she had furled her light sails, and clewed down her topsails, evidently having experienced a heavy squall.

I have here given you the principal facts, as well as I remember them ; but, I very much regret that so favorable an opportunity of witnessing these singular phenomena, was not enjoyed by one, whose scientific knowledge would

have enabled him to arrive at some correct conclusions on the subject. Writers who have already given their attention to it, differ very widely indeed in their theories. Dr. Franklin, Dr. Richardson, Dr. Stuart, M. de la Pryme, and others, contend that the water ascends to the cloud. Dr. Lindsay treats this opinion with great severity, and exercises both his wit and his genius to prove that the water descends in all instances, and that a water spout and a whirlwind are entirely different. Dr. Perkins, of Boston, held to the same belief, and had a long correspondence with Dr. Franklin on the subject; but it ended by each adhering to his own opinion. Mr. C. Colden, of New-York, differs again from all these, and (in a letter to Dr. Franklin, I think) asserts, from his own observation, that what is called a water spout, "is a violent stream of wind, rushing from the upper regions," &c. Indeed, all these gentlemen seem to have derived their different opinions from facts within their own observation, which go directly to prove their various theories; from which we can only infer, that water spouts are very different, in their appearance and operation, at different times.

At the short distance of sixty yards, I could see no evidence of a column of water, rising within the tube, to a height of thirty-two feet, as mentioned by Dr. Stuart. Had this been the case, the spout must have had a much darker appearance thus far, than from thence upward, which was not the case; but it was, on the contrary, more dense at the upper part, where it united with the cloud. But, even admitting that the water may rise within the tube, to a height of thirty-two or thirty-three feet —equal to the weight of the atmosphere—by what means is so dense a body carried upward several hundred feet higher, and there so diffused as to form a cloud? We believe that clouds are formed of vapor, which, when they become more dense than the surrounding atmosphere, form into drops and descend in rain. How then can a body of water, which is already heavier than the atmosphere, be supported within it, after spreading from the upper part of the spout? It seems to me that it would, as a matter of course, fall again the moment it left the impelling influence which carried it upward.

On the other hand, Dr. Lindsay contends that the water *descends* in a body, and describes a spout, as seen by himself, near the banks of Newfoundland, where he says the sea was so agitated by the violence of the falling water, that their ship felt its influence, and was considerably tossed by it at a distance of half a mile. This was very different from any case that ever came within my observation. In the course of my sea service, I have seen, perhaps, as many as twelve water spouts, but never observed any agitation of the sea caused by them, that would give a ship the slightest motion, even within sixty yards. I am confident, that a boat might have approached within a ship's length of the one I have described, as being nearest to us, without the least danger.

As to the theory of Mr. Colden, that the phenomenon usually called a water spout is nothing more than a stream of wind, rapidly descending, I can only say, that nothing in any of the spouts seen by me, ever gave me the slightest reason for such a belief. From the variety of accounts given of water spouts, it would seem almost impossible to establish any general theory on the subject. Dr. Stuart and Mr. Mercer say, they distinctly saw the water carried up into the air. Dr. Lindsay and several persons quoted by Dr. Perkins, plainly saw it descend; while Mr. Colden, at a distance of only forty yards from a spout, positively asserts, that there was no water at all, but a stream of wind descending with violence from the clouds.

For my part, I could not see that any of these principles were applicable to the spouts which I saw. The nearest, remaining within sixty yards of our ship for at least fifteen minutes, afforded a good opportunity of observing it minutely, and so far as this one (which seemed to be like all the others in sight at the time) can go in confirmation of a general theory, it inclines me to the belief of that part of Dr. Franklin's hypothesis, which supposes it to be a body of warm air, rising from the surface of the ocean to the upper and cooler region, where its moisture begins to be condensed into thick vapor by the cold, thus causing the spout to become first visible at its upper end. As the vapors continue to ascend, by constant

addition they become denser, and consequently their centrifugal force greater, until being risen above the concentrating currents which compose the whirl, they fly off, spread, and form the cloud.

Even Dr. Perkins, in one of his papers read at the Royal Society, June 24, 1756, favors this opinion so far as to say—"If spouts ascend, it is to carry up the warm rarified air, from below, to let down all, and any, that is colder above." But he adds—"If this be so, they must carry it through the cloud, perhaps far into the higher region, making a wonderful appearance at a convenient distance to observe it, by the swift rise of a body of vapor above the region of the cloud." This is an appearance which I have never observed, nor do I conceive it to be at all necessary to the establishment of the fact, that the air is carried upward. Such might be the case if the air ascended in a right line, but as I have already stated, it rises with a spiral motion, and as it becomes denser by contact with a colder atmosphere, it, of course, acquires a greater centrifugal force, which gradually enlarges the upper end of the spout to the trumpet form, until at length it flies off horizontally, thus uniting with, and increasing the cloud, instead of passing through it. It is possible, that when the upper region is much colder than the lower, the condensation of the ascending air may be so great as to cause part of it to fall again, through the spout, sometimes in the form of rain, or by a concentration of the drops, even a stream may be poured down, which would, in a measure, account for the theory of Doctors Lindsay and Perkins; but I could see no evidence of this, in any of the spouts near our ship. Some of the officers, however, thought they could see water falling within the tube, but all admitted the gyratory motion *upward*, as it was too distinct, for a difference of opinion.

As to the nature of the connection of electricity with water spouts, I must leave that point for others to determine. It is, evidently, largely combined with them; but whether as the cause, or merely the consequence of their existence, is a question which you will, no doubt, be able to explain. Spanish navigators of former days fully believed the water spout to be an electrical body, and that it might be broken or dis-

persed, by presenting to it the point of a bright sword, and even some modern writers have asserted, that they *have been broken* by this means.

I know but little of the laws of electricity; but from its palpable force when attracted from one object to another, I should be very unwilling to hold the sword, if I believed in the theory.

You will please excuse the length to which I have drawn out this letter. When I began, it was my intention only to give you a description of the water spouts as I saw them; and to this I beg leave to call your attention, rather than to my own opinions, which are merely the result of observation. A scientific knowledge of the subject might, perhaps, bring me to very different conclusions.

THE ACROPOLIS OF ATHENS.

By an Officer of the "Constellation," in 1830.

On the afternoon of the 8th of June, we had entered the Saronic gulf, and had, on our left, the prominent ruins of the temple of Jupiter Panhellenius, surmounting an elevated part of the island of Egina, and on our right, indistinctly seen in the distance, the Acropolis of Athens.

From the moment of passing Cape Colonna, and the celebrated remains of the temple of Minerva, to which it owes its name, every spot, in sailing along the shores of Attica, awakened thrilling associations; for the eye could scarce rest upon a point, either on the land or on the sea, that had not been the theatre of some memorable event. As we approached the Piræus, the "unclouded blaze of living light,"—which Lord Byron ascribes to the sunset in these pure and classic regions,—was fully exemplified in the departing glories of the orb of day, from which broad masses of light were cast upon the Acropolis, giving it, for the time, a bolder and more elevated outline, and displaying, in high relief, the magnificent Parthenon, towering in majestic grandeur over that choice repository of genius and art.

I never beheld a more glorious and animating spectacle; and for a moment, the illusion might have been complete, that time had spared its customary ravages, with this mighty monument of taste and power. The red light, penetrating its columns, and magnifying their vastness, seemed to display to our excited imaginations all the pristine glories of the wonderful temple, which has withstood the devastations of twenty-three centuries, and still retains so much of its original beauty, that the common sentiment of mankind proclaims it the most interesting and stupendous achievement of architecture, both ancient and modern.

Such a sunset, in such a scene, is indescribable; and all the opulence of language would be tame and powerless, to impart adequately the feelings of the moment. The vast plain of Athens, with its clustering olive groves, was spread before us, crowned by the Acropolis, itself surpassingly crowned by the temple of Minerva. This plain is surrounded by an amphitheatre of mountains—Hymettus, so renowned for its honey, being among the nearest and most conspicuous. A more beautiful site for a city, whose fame was to penetrate the remotest recesses of time, could not well be conceived; and there is something in what may be denominated the physiognomy of these regions, which causes "the spirit to stir within us," and the heart to burn. Whether it be, that the lessons and associations of early education exert a controlling power over the intellectual organization, causing them to transcend the impressions of any other period of life, and, by their magic influence, to excite us to enthusiasm in beholding the scenes of ancient splendor and magnificence, I know not; but I do know, that I was now subdued and overwhelmed by the rapid revolutions of thought and feeling, produced by the quick succession of the realities before me, still bearing the likeness, at least, of all their original freshness and glory.

The Parthenon stands like a monumental link between time and eternity, vivifying the creative energies of the mind, by one of the most interesting developments of its power, and teeming with the associations of mythological history, in the most splendid era of polytheism. It was a

fitting abode for Minerva as she sprung full-armed from the brain of Jove; and worthy of the undying homage of the Athenians of old, as of every succeeding generation of time. Although the individuality of its unrivalled beauties cannot be perceived without close approximation—which presents them in countless forms—yet the impression of its extraordinary vastness and excellence, is perhaps rendered more exquisitely vivid by the enchantment of distance. In the latter case, it uprears itself above every surrounding object, with a majestic sublimity, and a simple grandeur that fixes and absorbs your entire admiration; and it is, almost, with a feeling of regret, that, on a nearer approach, you find that admiration necessarily divided, between this gigantic ruin and the monuments and remains of the beautiful edifices—worthy of the best days of Grecian art—by which it is surrounded: forming, perhaps, the most noble and diversified exhibition of ancient taste and genius to be found, in a single spot, in the world.

This temple of Minerva was built by Pericles, on its present enlarged scale, with the beautiful temple of Theseus for a model, upon the site of that which had been burned by the Persians. It is said to have cost six thousand Attic talents*—a little more than five millions of dollars. The statue of Minerva, by Phidias, formed of gold and ivory, and thirty-nine feet in height, which adorned the tympanum, was crushed to atoms, in an attempt to remove it, by the Venitian general and Doge Morosini, in 1687. Until then, or within a very short time anterior to that period, the entire building is represented, by the concurring testimony of travellers, to have been in excellent preservation. During the preceding siege, the Turks had converted the temple into a powder magazine. A shell thrown by Morosini, from the hill of the Museum, fell upon it, and caused an explosion, which destroyed the roof, besides extensively rending, fracturing, and despoiling almost every part of the edifice. It was built of Pentelican marble, from an extensive quarry in the neighborhood—inferior in quality to the

* Langhorne's Plutarch, in the life of Pericles, says ten thousand.

Parian only, and although more liable to slight decomposition, is supposed a better material for architecture, from its greater freedom from the discolorations of time.

Having come to anchor in the bay of Salamis, we rowed, on the morning of the 10th, into the Piræus—the largest of the three ports of Athens, built by Themistocles, and connected with the Acropolis, by walls forty cubits in height. The Piræus was subsequently greatly adorned by Pericles, who, by an opposite, and connecting wall, completely enclosed it with the city. The harbor is not very capacious, although the channel affords about ten fathoms. Its entrance was formerly secured by piers, connected by an iron chain. At the foot of one of the piers, stood a marble lion of unknown sculpture; another was found in the Via Sacra, toward Eleusis, considered as having been the companion of the former. Hence the name of this entrance—from the Venitians—Porto Leone. The lions were removed by them, and now form a conspicuous ornament of the arsenal of Venice.

On landing, we procured horses, and proceeded to the Acropolis, traversing a part of the old wall which united the city to the Piræus; massive fragments of which are distinctly seen upon the plain. On our right we had the Phalerum—an eminence which commands the ports of Munichia and Phalerus, whose fine bay it adjoins. Upon it are traces of a theatre, which, in common with other noble public buildings, ornamented the quarter of the Piræus—the abode chiefly of the sea-faring citizens, but which, at one period, is stated, in point of splendor, to have surpassed the city itself.

Soon afterwards, we penetrated an immense grove of olive trees—the cherished gift of Minerva to Attica—now evidently thinned by fire. The tree here grows taller, and with more regularity, than we had elsewhere seen it in Europe and Asia. On emerging from this wood, we were close upon the modern town; and after passing on our right Mars' Hill, the celebrated seat of the Areopagus, at the base of the Acropolis, we found ourselves in full view of the beautiful temple of Theseus, and hastened forward to

its near inspection. A few years since, this superb edifice was perfectly uninjured; not a stone was wanting, it having escaped alike, the tremendous political revolutions which Greece has undergone for more than twenty centuries, the ravages of time, and the more blighting spoliations of the Turks. It is built of Parian marble, is small in its dimensions, and has comparatively even, now sustained, but little injury. Its peristyle consists of thirty-four columns of the pure Doric order, having six at each end. The cella is almost entire, and the wonderful preservation of the whole structure is ascribable to its having been converted into a Christian church, by the Greeks. It being closed, we could not see the interior of the nave, which contains the tomb of Sir John Watson, an English knight.

This temple was erected in honor of Theseus, when his remains were brought from Crete, by Cimon the son of Miltiades. The north-east angle of the roof has suffered much, apparently from lightning, and many parts of it bear evidence of having been profaned by bombs and shot. The frieze is decorated with numerous bas-reliefs, representing the heroic actions of Theseus, many of the figures being little defaced. Its position is almost on a level with the plain, and, though a frequented and compact part of the ancient city, is at present comparatively isolated, having the Acropolis immediately on the right, and the modern town in front. Nothing can perhaps be produced in architecture, either in existing structures, or in historical descriptions, more delicately and exquisitely beautiful than the entire temple. It has all the attributes of taste, harmony, and beauty, and, both in dimensions and site, stands in admirable contrast with the overshadowing majesty, grandeur, and power of the Parthenon above.

On reaching the mud walls of the modern city, we dismounted from our horses to obtain permission, from the Turkish governor of Athens, to enter the Acropolis; and, pursuing our way through a succession of narrow, winding and dirty streets, flanked by low and miserable houses, constructed of coarse mortar, intermixed with mud—sometimes interspersed with the fragments of Grecian columns and

capitals, which have been thus desecrated—we reached the abode of the Turkish chief. He received us politely, and readily granted our request, furnishing a Janizary for an escort. We asked the governor what was the population of the town. He replied, about four thousand Greeks and Turks, including only two hundred of the latter—a vague estimate, however, as the Mahommedan government never resorts to a census, to ascertain the population, of any part of its dominions.

From the specimen of the people afforded by our walk, it was difficult, with all possible sympathy for the iron sufferings and heroic fortitude of the Greeks, to divest oneself of the idea of a dirty and vagabond community. Still they dwell on the site of the ancient city, as is sufficiently proved by the Tower of the Winds, and the Choragic column of Lysicrates, commonly called the Lanthorn of Demosthenes, —known to have stood in the street of the Tripods—and now surrounded, by these wretched buildings.

In proceeding to the Acropolis, we ascended the hill without difficulty and without pause, till we came to the modern gate of the fortress. This was thrown open to us, and pursuing our route, we soon passed, on our left, the Propylæa, or massive and magnificent entrance of the citadel, built by Pericles,—which commanded the applause and admiration of the Athenians, by its gorgeous and costly decorations, and its architectural beauty—and entering upon the level of the principal elevation, at once stood in the presence of the Parthenon! I say presence, for no one could at that moment have been conscious of any other. Every faculty was engrossed, if not overpowered by the view, and I doubt whether any of our number, for the time at least, thought of aught else but of that which is, emphatically, and distinctively the TEMPLE OF MINERVA.

But how to "describe the undescribable!" We can give the dimensions of the stupendous structure, its length and breadth and height, and the number of its remaining columns, but can convey no full and satisfactory impression of its imposing grandeur, beautiful simplicity, and exquisite symmetry; nor can we faithfully analyze even our own emotions

in beholding it, or the calmer impressions afterward produced. There is no affectation in confessing, that the writer felt that oppressive intensity of interest which Byron realized, in viewing another chef d'œuvre of art, and so eloquently portrays, in his 4th Canto of Childe Harold—

> "We gaze and turn away, and know not where,
> Dazzled and drunk with beauty, till the heart
> Reels with its fulness; there—for ever—there
> Chain'd to the chariot of triumphal art
> We stand as captives, and would not depart!"

The Parthenon was originally supported by forty-six columns, viz. eight at each front, and seventeen on either side, including the angular columns. In this description, which relates only to its *peristyle*, or exterior colonnade, the inner row of parallel columns at each end, which adjoined and sustained the cella, are not included. There are now standing erect, in all, thirty-nine columns, and not twenty-nine, as has been erroneously counted, or printed. Its length is two hundred and twenty-seven English feet—its breadth one hundred—and its height sixty-nine. The columns, including their capitals, are thirty-six feet in height, and without the capitals, thirty-four feet and one inch. Those principally destroyed were in the centre. It is in the pure Doric style.

Every part is massive and imposing, yet all in such admirable harmony as to produce in the mind the idea of perfect symmetry, grace, and beauty. Its ruins are still vast and magnificent, and seem to stand in proud defiance of the decay so busily at work with the remains of lesser sanctuaries and monuments around; and nothing seems wanting, but the power of replacing its scattered parts, to restore it at once to its original perfection and glory. The ornamental remains of the Parthenon, so far as its inimitable sculpture is concerned, must be chiefly sought in the British Museum, as it is well known they were long since removed to England, by Lord Elgin, at an expense to himself, for which he was but in part remunerated, in their final purchase by the British government.

A very brief extract from a writer—Mr. Wines, author of "Two years and a half in the Navy"—who made his ex-

amination simultaneously with the author of this article, will convey a very correct account of the principal fragments of the kind, yet attached to this unrivalled edifice. He says—

"The tympanum of the west front, though considerably injured, still remains; but that of the east front, from which Lord Elgin removed the two colossal female statues, the Neptune, the Theseus, and the inimitable horse's head, has fallen down since Hobhouse's visit to Athens. Of the sculpture on the frieze of the peristyle, representing the battles of the Lapithæ and Centaurs, there are remaining at present only a few mutilated figures; and the little of which I have already spoken, on the inner frieze of the pronaos, is all that is left of the six hundred feet, originally surrounding the cella, and representing the Panathenian festival. The remains of the walls and pavement of the cella are most entire, at the western end."

The interior of the Parthenon, originally constituting the cella, is now occupied by a small, mean, intrusive Turkish mosque—a superstructure which has been raised on the floor of the temple, as if the intent had been to expel the worshippers of Minerva from her shrine. A more striking illustration could scarcely be furnished of the persevering and fanatical hostility of the religion of Mahommed to the arts. The top of the Parthenon is gained by a pile of ruins—the most prominent remain of the cella—in a corner of the nave, or body of the edifice. From its summit we enjoyed a widespread and delightful view of the beautiful peninsula of Attica, its celebrated mountains and immortal plains, and the islands resting on the bosom of its placid waters.

To the north of the Parthenon stands the cella of the temple of Pandrosea, the only part left, supported by cariatides. Three of these are in their original position, and one, with its head off, is thrown down, forming a sort of connecting bridge between the structure it adorned, and the adjacent pile of ruins. This temple was of the Ionic order, and built in exquisite taste. At the north-west angle of the Acropolis, is a part of the temple of Erectheus, with some remaining Ionic pillars. These, with the remains of the part

dedicated to Minerva Polias, form the most prominent memorials of the proud Acropolis of Athens, perhaps the richest and noblest treasury of art, of which Greece even in her meridian glory could boast.

On descending from the Acropolis, and passing along its southern base, we had on our left the remains of the theatre of Herodes Atticus, built in honor of his wife Regilla. They consist of a triple row of superincumbent arches of solid masonry, belonging to what was called the scene, from which in this theatre, the actors and poets, in emulous rivalry for the prize, exhibited to the assembled multitude their claims to distinction and fame. Still farther to the left are some fragments of the temple of Bacchus, and, adjoining these, two columns of unequal dimensions with Corinthian capitals, supposed to be Choragic monuments.

To the right, in traversing the road in this direction, is the ridge of ground called the Pnyx, with the projecting rostrum, or platform of rock, from which Demosthenes was accustomed to harangue the people of Athens. It is an elevated position, calculated to overlook an immense multitude—one more advantageous, for a popular orator, in addressing himself to the passions of a tumultuous democracy, could hardly be contrived. Not far distant from this rostrum, on the side of the hill, are the chambers in the rock, said to have been the dungeon of Socrates, the scene of his imprisonment, and of the various affecting interviews with his friends previous to his death, and the spot on which he calmly swallowed the fatal hemlock.

Pursuing the road, which circumscribes the Acropolis, farther to the east, we came to the remaining sixteen columns of the temple of Jupiter Olympius. The shafts of these are sixty feet in length, and are surmounted by richly wrought Corinthian capitals. This temple was commenced by Pisistratus, and finished by the Emperor Adrian, who also erected, near it, his celebrated arch or gateway—still in good preservation—which divided the new city, built by him, from the old; a fact perpetuated by the inscription upon it—

"THE CITY OF ADRIAN, AND NOT THE CITY OF THESEUS."

This temple of the Olympian Jupiter, originally, consisted of one hundred and twenty columns. On a part of the remaining architrave, surmounting those still standing, is perched—if we may be allowed the expression—a brick dwelling, of contracted dimensions, in which a fanatical monk, some centuries ago, as a work of extraordinary penance, ensconced himself, and remained like a bird in his eyrie, until his death, drawing up, for years, indispensable sustenance in a basket. Such is the tradition of the spot; and we know, that such absurd mortifications and penances have obtained, in different ages of the church.

The marble was brought from Pentelicus, and preserves nearly all its original freshness; and the gigantic ruins yet furnish a most beautiful specimen of the pure Corinthian order. The original dimensions of the structure were more spacious than those of the Parthenon, but its position, being situated on the plain, is far less imposing. The base of the enclosing walls, constructed in the most durable Cyclopian style, still remains, and shows a part of the outline of the immense area, in which the temple stood.

Following the direction of the ancient street of the Tripods, we next came to the Choragic monument of Lysicrates—as the inscription indicated—commonly, but incorrectly, called "The Lanthorn of Demosthenes." It has been much admired by all tourists, as a beautiful specimen of Corinthian architecture, of masterly execution, and for the extreme delicacy and fineness of its ornamental sculpture. It is a small circular building, with pilasters, surmounted by Corinthian capitals, and connected by marble intercolumniations—the absence of some of the latter being supplied by modern stone and mortar. The bassi relievi, on the frieze, are exceedingly chaste, and well preserved, and represent the adventures of Bacchus with the Tyrrhenian pirates.

The "Tower of the Winds," which is within the modern city, is also one of the best preserved monuments of Athens. Its form is octagonal, each face being exposed to one of the principal winds, allegorically and beautifully represented, in bas relief, by figures in the act of flying. Some of these

have been mutilated, but, generally, are very entire, though somewhat discolored by time. The cupola was surmounted by a bronze Triton, with a wand in its hand, which pointed the direction of the wind.

Leaving the modern town again, we now proceeded in an easterly direction, and crossing the dry bed of the far-famed Ilissus, near the remains of a massy bridge, soon reached the Stadium of Herodes, a vast enclosure in the form of a horse shoe, with some remains of masonry, at the terminations of the curve. All the rest is green sward; but, from the regularity of the acclivity and the projections of its sides, the position of the ancient rows of seats of marble for the spectators is evident—indicating its ability to contain an immense multitude of people.

Near the entrance, or west end of the Stadium, once stood a small but beautiful temple to Victory, by which those, who were triumphant in the games, went forth, after the contest, amidst the plaudits of the people; while at the farther end, a long subterranean passage was cut through the hill to furnish an unobserved retreat to the vanquished. This still remains open, and we passed through it upon our horses. After this, we fixed, as accurately as in our power, the site of the Lyceum, no vestige of which is to be found. And then returning upon our steps, and passing what is considered the sepulchre of Cimon, and his mares, which had thrice been victorious in the Olympic games, we ascended as a last point of observation, Mars' Hill—so celebrated as the ancient seat of the Areopagus, but still more interesting to the Christian, as the spot, from which St. Paul made his simple, but sublime appeal to the Athenians, in reproof of their superstition and idolatry, and declared unto them Him, whom they ignorantly worshipped—THE UNKNOWN GOD.

H * * * *

MALARIA, PRODUCED BY VEGETABLE AND ANIMAL PUTREFACTION, AS A CAUSE OF FEVER.

By Usher Parsons, M. D. Professor of Anatomy and Surgery, Providence, R. I., late Surgeon in U. S. Navy, and Corresponding Member of the U. S. Naval Lyceum.

[Continued.]

II. *The effect of Animal Decomposition upon the Human Body.* If medical men have generally agreed in opinion, respecting the febrific nature of exhalations from decomposing vegetables, it is far otherwise in respect to those emanating from animal substances. There are probably, at this time, a majority of the best informed of the profession who regard animal decomposition as innoxious in its effects, or at any rate as not productive of fever of any kind; and this opinion is now prevailing with the profession both in Europe and America. This is owing, in no small degree, to the distinguished rank and talents of several individuals who imbibed the opinion, and maintained it publicly, and with great zeal and ability, in works on fever, and in many of the periodicals of the present day. At the head of these may be named Dr. Bancroft, who, though not the first in declaring that animal putrefaction has no febrific qualities, has taken more pains to establish such a belief than any other individual. The other gentlemen I shall mention, are two distinguished professors, viz. Drs. Chapman and Warren, of Philadelphia and Boston, who, to the many facts adduced by Bancroft as proofs of this doctrine, have added several corresponding ones, from their own observation. The public teachers of medicine in our medical schools have likewise, in most instances, supported the same opinions. Such distinguished leaders, in support of any doctrine, will naturally draw numerous advocates into their ranks, and hence we find the opinions of these gentlemen pervading the profession generally.

In the early ages of medicine, the opinions respecting the febrific nature of decomposing substances, was the reverse of what we have stated it is at present. Indentifying the morbi-

fic character of putrescent substances with their sensible odor, they regarded their pernicious effects upon the constitution as proportioned to their offensiveness to the olfactories. "The Egyptians, Jews, Greeks, and Romans were careful to dispose of their dead by burning, or by burying them far without the walls of their cities;" and their armies were cautioned against encamping long near a field of battle, lest the putrefying bodies of the slain should generate pestilential diseases. The same belief continues to prevail even in modern Europe. In France and Italy edicts were issued from time to time, by both secular and ecclesiastical authorities, from the eighth to the eighteenth century, against interments in churches and cities—and it is probable that, but for the writings of Dr. Bancroft and others, the same belief would have continued to this time. As the subject is interesting to health and life, it is time that the opinions of Dr. Bancroft and his disciples, as well as the facts on which they are grounded, should be carefully examined, and collated with other facts that will tend either to confirm or refute them. The question proposed for this essay presents an opportunity for doing this, and with the deference due to the elevated rank and distinguished talents of the gentlemen we have alluded to, a feeble attempt is here made to canvass the evidence on both sides of the question.

The reasons urged in support of the innoxious or non-febrific nature of animal decomposition, are, *first*, That the number of instances wherein fever has been actually ascribed to such a cause, by those who believe in its power to produce it, is very small, and the cases are not well attested. *Second*, That when the cause has existed in greatest abundance, and was therefore most likely to produce fever, this has not occurred.

Let us now inquire what are the kinds of fever that have been attributed to this cause? Taking the nosological arrangement of Dr. Good, we may arrange idiopathic fevers under the following heads:—1st. Intermittent. 2d. Bilious remittent, simple and malignant; the last of which includes yellow fever. 3d. Hectic common inflammatory fever. 4th. Typhus gravior. 5th. Typhus mitior. 6th. Synochus. From this list we are justified, by the nature of

their known causes, by the local circumstances of place where they occur, as well as by their general character, in dropping all, except yellow fever and typhus gravior. Most, if not all practitioners, will concur in the opinion, that the other kinds have rarely, if ever, been attributed to animal decomposition. Alibert remarks, that intense application to dissections has in some instances caused malignant intermittents in Paris. But I have witnessed no such effect there, nor elsewhere, whilst many physicians of the first respectability, who have passed years in such employments, deny that such fever has, in any instance within their knowledge, been ascribable to such a cause.

The two fevers just mentioned have been variously named—typhus gravior being termed the hospital, jail, or ship fever, and by some malignant typhus or putrid fever; the other has been called typhus icterodes—malignant bilious remittent, but more commonly yellow fever. Those who believe that vegetable decomposition alone produces fever, (leaving contagionists out of the question,) ascribe both kinds to this cause alone; and those who believe in the febrific qualities of animal as well as vegetable decomposition, attribute yellow and putrid fevers to each of these agents, or to both combined, under the name of vegeto-animal putrefaction.

To the above causes of these two fevers may be added that of contagion, which is strenuously maintained by some as the most frequent cause, and is as warmly opposed by others. But as the question of contagion is foreign to our present investigation, and would require a volume to support or refute it, we here take leave of it, and return to the question: *If yellow and putrid fever can be produced by animal decomposition, why are there not more and better attested cases to prove it?*

In answering this question, we are to keep in mind the circumstances, which we have already considered, which tend to give efficacy to vegetable decomposition as a cause of these fevers: they are intense heat, moisture, and abundance of decomposing materials. Now, careful examination of the two cases will show that these three circumstances occur often, in respect to vegetable matter, and but very rarely in respect to animal matter.

In the first place, in respect to heat and moisture, animal

matter is rarely found, like vegetables, in suitable relation to them. It is not abundant, like vegetables upon marshes, where the sun can act upon a broadly extended surface of it, and that, too, while in a constantly moist state. When exposed to the degree of heat that will elicit the cause of such fevers from vegetables, animal matter soon parts with its own moisture by evaporation, and becomes perfectly dried. The jerked beef prepared for commerce under the tropical sun of South America is a proof of this fact. Every anatomist knows that his preparations can be preserved in midsummer if hung in a draught of air. The human bodies preserved for centuries in the cemetery near Palermo, were secured from putrefaction by heat, as are the bodies of those who fall in the deserts of Africa.

Where, however, a carcass is not placed under such favorable circumstances for desiccation, we know that it can exist in a putrid state but for a comparatively short space of time. The law imposed upon animals, "Eat or be eaten," is imperative; and we know, without referring to Scripture, that "where the carcass is, there will the eagles be gathered together." Carnivorous animals, large or small, are always at hand to consume every species of carrion.

One of the signs of approaching malignant fevers, is increasing swarms of flies, and of other insects, which, whether they have just sprung from putrid matter that has escaped human observation, which is to generate the disease, or are provided for the purpose of removing such matter, we know that they are present to consume putrid animal matter.

Add to this, that in all populous places where such fevers spread, the police is always peculiarly observing of dead animal substances. Guided chiefly by the impressions made upon their senses, the peculiar offensiveness of effluvia from putrid animal substances, as well as the lothsome sight of them, leads to greater precautionary measures. A dead cat in the street is removed and buried, whilst putrid vegetable matter remains collected around the walls of buildings, and putrid coffee is thrown into the docks. A dead rat, concealed in a dwelling, will extremely annoy the inmates till every pains is taken for its removal, or will

drive them to some other part of the dwelling that is less scented, whilst putrid potatoes, turnips, and cabbages in the cellar, of a hundred times the bulk, are often entirely disregarded. The crew of a ship in sickly ports, in hot seasons, will, if left to their own inclination, sleep on deck, in an atmosphere loaded with morbific vegetable exhalations, whilst a single putrid rat, or even mouse, concealed in the cabin or forecastle, would cause a thorough purification of the apartment. The shores of rivers and streamlets, bordered by marshes, are often visited in a summer's evening with delight and temporary refreshment; whilst the stench of a slaughter house in the neighborhood of a city, though containing scarcely a visible portion of decomposing animal matter, is turned from with disgust. With such precautionary measures in the one case, and neglect of them in the other, because the senses are differently affected, can it any longer excite wonder that the fevers we have mentioned, supposing them producible by it, should so rarely proceed from animal decomposition, and yet so frequently from vegetable decomposition? Seeing, too, that the latter is so abundant about populous places, and requires only a long continued heat, from 80 to 100°, to act upon it, whilst putrid animal matter is at such times, for the reasons we have mentioned, so rarely to be found.

Much has been said of the influence of city interments upon the public health, and those who hold to the innoxious nature of animal putrefaction, might refer me to burying grounds for sufficient quantities of decomposing bodies. It is not worth the time to examine the fine-spun theories published by Dr. Pascalis, to show that "the fetid gases in a grave can permeate the superincumbent earth, and exhibit phosphorescent light hovering over the spot, and impregnating the atmosphere with morbific principles." Sufficient for the present discussion is the fact, that when the yellow fever broke out in New-York, from Coentis' slip,* and spread through the neighborhood, its progress was immediately arrested by covering the putrid animal and vegetable materials

* Medical Recorder, Vol. VII. p. 468.

from which it issued, with fresh earth. But because dead bodies when covered with earth, as in this case, and also as in graves, do not produce fever, are we to infer that such bodies would not produce fever if exposed to the open air ?

But, secondly—*When animal decomposition has existed in greatest abundance, it has failed to produce fever.*

Here we are met with the often-recited accounts of Bancroft, and others, respecting the mass of putrid animal matter exposed to the air in the exhumation at Paris and Dunkirk, and in dissecting rooms, and the putrid emanations from the burial ground at Seville. Let us examine them—first stating them in Dr. Bancroft's own words.

"Many writers of celebrity, and among them the great Lord Bacon," says Dr. Bancroft, "have thought that no effluvia were so infectious and pernicious to mankind, as those which issue from putrefying *human* bodies; and it is still believed, that, in their milder state, they may cause putrid fevers, and in their more concentrated state, a true pestilence. There are facts, however, on a large scale, which completely decide this question;—two of these deserve particular notice. The first relates to the exhumation made in the church-yard of St. Elvi, at Dunkirk, in the year 1783; and the other to those made three years afterwards, in the church-yard of the St. Innocens, at Paris. As the undertakings and results were similar in both instances, I shall, to avoid repetition, here describe only the latter, which I have preferred, because the corpses here taken up were much more numerous than at Dunkirk, and probably constituted the greatest mass of putrefying animal matter, of which we have any accurate information. The church-yard of the St. Innocens, at Paris, situated in one of the most populous quarters of the city, had been made the depository of so many dead bodies, that, although its area enclosed more than one thousand seven hundred square toises, or near two acres, yet the soil had been raised by them eight or ten feet higher than the level of the adjoining streets; and upon the most moderate calculation, considerably more than six hundred thousand bodies had been buried in it during the last six centuries, previous to which date it was already a very ancient burial ground.

Numerous complaints having been made concerning the offensive smells which arose from this spot, and sometimes penetrated into the adjoining houses; and the public mind being greatly alarmed, it was at last determined to forbid all future burials there, and to reduce so much of the superstratum as would reduce the surface to the level of the streets. This work was undertaken in 1786, under the superintendence of M. Thouret, a physician of eminence in Paris, and in two years he accomplished the removal of that superstratum, almost the whole of which was impregnated, or *infected* as M. Thouret styles it, with the remains of carcasses, and of quanties of filth and ordure, thrown upon it from the adjoining houses."

"'The exhumations,' says this gentleman, (in the narrative of them, which he published in the Journal de Physique for 1791, page 253,) 'were principally executed during the winter, but a considerable part of them was also carried on during the *greatest heats* of summer.

"'They were begun with every possible care, and with every known precaution; but they were afterwards continued, almost for the *whole* of the operations, without employing, it may be said, *any precaution whatever;* yet no danger manifested itself in the whole course of our labors—no accident occurred to disturb the public tranquillity.'"

The facts here recited from Bancroft to prove the innoxious nature of putrid animal matter, relating to the exhumations at Paris and Dunkirk, make a strong impression on the mind of one who merely glances at them. But a close examination of particulars will show, that if Dr. Bancroft has told the truth, he has not told the whole truth; but like a skilful advocate, rather than an impartial judge, he has suppressed important parts of the evidence, which, if related, would prevent him from making out his case, and take away the support he intended to derive from them to his favorite hypothesis.

In referring to these, and all other cases of animal decomposition, we are to bear in mind the circumstances we have already related of vegetable matter, as necessary to constitute it a cause of malignant, yellow, or putrid fever. And

in the first place, in respect to heat. This, it has been shown, must range above 80° of Fahrenheit for several days, in order to generate these fevers from vegetable decomposition. Now what was the temperature at the time the exhumations took place. "They were commenced at Paris in December, 1785, and continued till May, 1786—renewed again in the following December, and continued till February, and from the month of August, 1787, to the month of October."* There were only one or two months of the time in which malignant, putrid, or yellow fevers, from even vegetable putrefaction or any other cause are supposed to occur. "They took place in the night season only."† Johnson says "that miasm from marshes is expanded by heat, and that the evening air cools and condenses it; that it is the descending vapor of evening that precipitates with itself the miasm that had been elevated by heat, and hence twilight of evening is the time of greatest danger;" and that it is comparatively safe afterwards, is stated, as before observed, by the Italians. Now, in the present case, there was no emanation in the day time, because the bodies were not uncovered till evening for removal, and then the cool air had no tendency to evolve and raise it from them.

2d. As to quantity of matter, "six hundred thousand bodies," says Bancroft, giving an impression that an immense number were exposed at one time, when, in truth, they were removed as fast as uncovered.

3d. To give credibility to the account of such numbers being buried he is obliged to admit that they were six centuries' work; yet not to lose by this concession of the great length of time they had lain, he takes care to add in a note, that ninety thousand (and this, I admit, is sufficient for his purpose as to numbers) were buried within thirty years. But he is cautiously silent as to the time of the last interments, and also as to the time that animal matter is supposed to retain its febrific qualities. Now what is the fact in respect to these particulars. In respect to the duration of the morbific prin-

* Dict. des Sciences Medicales, art. Exhumation, Vol. XIV. p. 196.
† Ibid.

ciple, in decomposing animal bodies, Maret,* an eminent French writer, states three years as the time for complete decomposition when the grave is four feet deep, and four years when it is six or seven.

What says Fourcroy? This gentleman, who was employed for chemical purposes in the exhumation of St. Innocens, states "three years as a term during which the septic poison must take place."† Speaking of this very exhumation, he remarks, (p. 142,) "we had a strong desire to satisfy ourselves, by experiment, what was the nature of the destructive air, or 'septic explosion,' emitted from corrupting bodies, but we had no opportunity, in consequence of there having been no burials there for three preceding years; the last deposit there being in 1782." Now the month of August, 1787, was the time when "the bodies were removed in the hottest weather," as Bancroft relates it, which was five years after the last interment, and two years after morbific miasm, according to Maret and Fourcroy, had ceased to exist. Nor is it at all likely that the last interments, five years previous to said August, were specially reserved for this hot month, but most probably much older interments. There were, therefore, no bodies removed that were in a stage of decomposition favorable for producing febrile diseases, in *any* weather, however hot, even had the whole number been exposed to the air of midday at once.

But "the bodies," says the report, "were in every stage of decomposition." This expression is, however, to be understood as qualified by the time, that is, they were in every stage of decomposition after more than three years' interment, in which time the septic emanation is completed. And should circumstances of soil or manner of interment prevent putrid fermentation from taking place within that time, it is probable that the deleterious emanations are decomposed, and recombined in new and harmless forms.

Another fact, particularly worthy of notice, which Bancroft unfairly or ignorantly omits to mention, is—

"The great number of torches and fires that lighted all

* Dict. des Sciences Medicales, Vol. XIV. p. 192.
† Pascalis, p. 150.

parts of the cemetery and shed around a melancholy glare," and "the thick clouds of smoke that surrounded and covered the place of labor."*

Fires and smoke have been found of great utility, especially in military service, as was proved on a large scale by Bonaparte, before Mantua; and in Africa, the experiment in a small way has proved successful.

"Emigrants proceeding to Alabama and other southern regions, from the low counties of Carolina, find no injury from sleeping in the open air, as their custom at night is to build a large fire of logs, and lay themselves beside it, on some part of their baggage. The effect of fires in destroying malaria, is plain, if the fact of its existence depends upon the presence of moisture; for the moisture being evaporated by the heat, the poison is either dispersed with the vapor, or if separated from it, falls innoxious, and probably inert. It is on the same principle that smoking cigars on the decks of ships is salutary. The heat and smoke keep a dry atmosphere about the uncovered face, and the air respired, being thus deprived of miasmata, is safe."

What then becomes of this formidable array of six hundred thousand bodies removed from the cemetery of St. Innocens, which occupies the front ground of the picture drawn up by Bancroft, and is copied verbatim in two of our public journals, in Boston and Philadelphia, by two of the first medical men in our country, and minutely repeated before classes, by almost every professor of theory and practice in our medical schools? 1st. They were removed as fast as they were uncovered. 2d. The exhumation took place at a season of the year when malignant fevers caused by malaria are known and believed by Bancroft not to exist, with the exception of two months, August and September, and in the night season too, when the degree of heat of *those* months is not sufficient to produce malaria. 3d. They were removed full two years after the time that an eminent chemist, who was present, states that they had ceased to be productive of morbific gas; and lastly, with such precautions and preser-

* Dict. des Sciences Medicales, Vol. XIV. p. 187.

vatives by fire and smoke as would probably have disarmed the exhalations of their poison had there been any.

Another case of disinterment, quite as formidable, is given by Bancroft, which took place at Dunkirk in 1783, and which he declines relating, "because," he says, "the undertakings and results were similar in both instances, and he wished to avoid repetition." When did this take place? It was commenced on the 26th of February, and finished on the 16th of April,* a season in which no fevers from malaria, of either vegetable or animal origin, are believed even by Bancroft to exist.

Now I appeal to the reader, I appeal to the candid part of the profession at large, whatever may be their opinion of the noxious or innoxious nature of animal decomposition, to decide if it was fair and candid in Dr. Bancroft, to shuffle the two reports of the Paris and Dunkirk exhumations together, and turn up the face of one, and declare to the world that it is an exact representative of the other, when the most material point, the "*hottest weather*," is stated in the one case to have existed, and is italicised by him as a most material fact, and could not have existed in the other, the weather being cold, partly in winter.

Dr. Bancroft next goes on to recite M. Berthe's description of burying places at Seville, and tombs and vaults in Cadiz, in the spring after a destructive yellow fever of the preceding season, and concludes by saying "that the heats of the spring mentioned in Berthe (*which I need not observe are considerable at Seville*) were at this time beginning to be felt; and the ground being clayey, was cracked into wide and deep crevices, through which a fetid odor was exhaled, the result of the decomposition which was going on among those heaps of bodies." "*Thus it appears*," adds Dr. Bancroft, "*that the putrid emanations from the bodies of many thousand persons who had recently died of yellow fever, did not, and therefore could not, produce that disorder.*"

Now the italicised lines are here supplied by Dr. Bancroft himself, and serve to show his readiness to bend and

* Dict. des Sciences Medicales, art. Exhumation, Vol. XIV. p. 196.

qualify evidence to suit his purpose. Thus "*greatest heats of spring*," and who, let me ask, will pretend that the thermometer ranges at Seville so high as 80° in the spring for a succession of days, or that the yellow fever ever prevails there till the summer is far advanced? Yet, apprehending that the word *spring* would imply a moderate temperature, he gratuitously supplied a qualification to make the heat greater in the mind of the reader than it actually was, and such as is requisite to produce malignant fevers from malaria, which, as we have before stated, ranges during the prevalence of yellow fever at 80° and upwards.

Yes! "*greatest heats of summer*," which in the Paris exhumation Dr. Bancroft thought of so much importance in his report, that it made him italicise the words, but which in the Dunkirk case, that took place in cold weather, he thought of no consequence to distinguish it from that of Paris; yet here he would fain make the impression that "*greatest heats of summer*" (or that degree which he elsewhere deems essential for the production of yellow fever) occurred in the spring! And because these bodies "*did not produce yellow fever*," at a season of the year when such fever never exists from any cause, the gentleman concludes forthwith, and positively declares, that they "*could not produce that disorder*" at at any season. Admirable logic!

In the appendix of Bancroft is a long account of the innoxious effects of dissections. But are these ever prosecuted in the heats of summer, when yellow fever prevails?

The account of an adipocire establishment near Bristol, in England, is unaccompanied by any statement of the season of the year, or of the temperature of the atmosphere, or the number of persons employed or exposed to the effluvia, or of the amount of putrid animal matter existing at the same time.* The same imperfection attends the accounts of the dead bodies washed on shore near Aboukir, the glue, soap, candle, catgut, and leather factories.

I contend for no more, in respect to heat, moisture, and abundance of materials, to give febrific activity to animal

* It is, moreover, known that the temperature of water in which adipocire is made, must be below even 60°.

decomposition, than is already conceded, by Bancroft and others, to be indispensable for the production of yellow fever from vegetable decomposition. When, therefore, the above instances, cited by Bancroft, to which many others have been added by the Boston, Philadelphia, and Baltimore writers; when, I say, these instances are accompanied with evidence that heat and moisture concurred at the same time, and in the same degree, as is admitted to be necessary for the production of yellow fever from vegetable matter, then, and not till then, is any of this negative kind of evidence admissible against the febrific power of animal decomposition. As well might one contend against the generally received doctrine, that marsh miasm possesses febrific qualities, and, pointing to the swamps and marshes, both fresh and salt, of New-England, demand why these do not annually produce fever.

"In regard," says Bancroft, "to the morbid effects supposed to result from the putrefaction of fish, they appear, so far at least as regards fever, to have had no existence." This assertion I shall have occasion to notice hereafter, and refute by positive testimony to the contrary. That the boiling of blubber should be harmless, notwithstanding its offensive effluvia, is what might certainly be expected, considering the great power of fire, as before stated, on several authorities, to destroy malaria.

The use of fish for *manure*, as herrings, alewives, &c. is adverted to by Bancroft, and also by the gentlemen before alluded to, in Boston and Philadelphia. It should be borne in mind, however, that these fish are most of them buried, and that such of them as are above ground, are strewed over it, and, from their small size, are soon dried; they are thrown in heaps, in the manner that putrid coffee, potatoes, and cabbages were, when *they* produced yellow fever, as appears from the several reports contained in the Medical Repository, and other publications. From those it seems, that a sort of intestine heat and fermentation, in the centre of the mass, is necessary to produce yellow fever. Now, the time required for this heat to generate, in animal or vegetable substances, from the evolution of new gases, is

many days in the human body, buried many months, and almost as many weeks above ground; whilst two or three days are sufficient to desiccate small fish strewed upon the ground, and prevent the fermentative process from taking place, although they may evolve disagreeable effluvia, as stated to be the case, by the Boston and Philadelphia writers, of those strewed upon the grounds near Newport, and on the banks of the Delaware.

Thus, I have examined nearly all the facts related by Bancroft, and the other gentlemen alluded to, and have shown that there were circumstances, connected with each, that weaken its force, and, in almost every instance, destroy it altogether, as a proof against the febrific power of animal decomposition.

The Boston and Philadelphia writers attach great importance to the exhumation of St. Innocens, as settling the question that animal decomposition never causes fever. In this they choose to "*go for the whole*," whilst Bancroft, from whom they have copied this account of St. Innocens, and almost every other fact they advance, warily shields himself by a saving clause in his conclusion, which they have not seen fit to avail themselves of. The clause is this: "If putrefying animal matters are not completely harmless, they are at least innocent of the charge of producing *contagious fevers*." Contagion was his subject of discussion, and he does not positively deny that fevers which are non-contagious, (and such he regards yellow fever,) can be produced by animal decomposition.

The Boston writer, with a spirit of candor that marks his whole paper, concludes it by saying, "Should a difference of opinion exist on any important point, I hope these remarks will have the effect to call it forth." I therefore respectfully ask leave to dissent from his conclusion in one particular, even were the facts sound and incontrovertible from which he draws it. The case, (says he,) of the cemetery St. Innocens, has been considered to be conclusive of the non-febrific nature of animal decomposition, if no positive and satisfactory facts can be adduced on the opposite side. Now, I maintain that this cemetery case, and all the other

facts cited, amount to no more than negative evidence, and that unless the gentleman can show that they combine every circumstance that could favor the operation of animal putridity in causing fever, which would be next to impossible, the evidence amounts only to probability, and is not "*conclusive*," even if no facts were adduced on the opposite side to prove that it does cause fever.*

One well established fact, however, proving beyond doubt that animal decomposition possesses febrific properties, is sufficient to controvert all the negative evidence to the contrary, which the gentlemen have adduced. It is now my purpose to offer many such facts.

1. The Rev. Henry Channing, in a letter to Dr. Mitchell, see Medical Repository, Vol. II., p. 402, states it as his own opinion, and that of Dr. Coit, Dr. Lee, Mr. Woodman, and Mr. Holt, that the yellow fever which prevailed in New-London, in 1798, was caused by putrid fish. Of the whole number of cases of fever, (246,) "two hundred and thirty-one were clearly traced to the spot where the sickness commenced, that is, the persons were conversant, or had been in that part of the city a few days before they were seized," and "scarcely a single person escaped the disorder who resided in that part of the city."

"It appears," says Mr. C., "that there was a large quantity of dried fish, in a bad state, in four or five stores, within twenty or thirty rods of each other, and all in the limits referred to. These fish were taken in the Straits of Bellisle, which being a high northern latitude, they were cured with a much less quantity of salt than usual. They were brought to this port in the autumn of 1797. The heat of the summer having been very great, many of these fish were found to be in a moist, slimy state, early in August last. From a quantity lying in bulk, in a store occupied by Mr. Jones, (who fell a victim to the epidemic,) a quantity of green and yellow purulent matter ran upon the floor. It

* The Philadelphia writer expresses himself to the same effect as the Boston writer, in the following words: "It follows, from the preceding series of facts, that animal putrefaction alone cannot be assigned as an epidemic cause, or scarcely indeed as a morbid agent."

was thought by the owners, that if they were spread in the sun, in the open air, the fish might be preserved; which was done, extending them a considerable distance in the street and wharves. While thus exposed to the excessive heat of the sun, with light winds, the effluvia in the neighborhood were very offensive."

Mr. Channing states that there was not even a shadow of ground to suppose that the disease was imported—and the situation of New-London is elevated, "with scarcely any low lands to generate marsh miasmata." The harbor is spacious, near the sea, from which refreshing breezes are experienced during the summer. The heat of the summer of 1798, it may be mentioned, exceeded, both in intensity and duration, what had been known within the memory of the oldest inhabitants.*

2. Dr. Samuel Osborn relates, in the Medical Repository, Vol. I., p. 210, a case of yellow fever, caused by exposure to the exhalations of putrid beef. The patient, a soldier, was excused from duty on account of a violent and obstinate gonorrhœa; and a lodging was assigned him in a house without the garrison, on Governor's Island. In a few days, he was attacked with symptoms of yellow fever, and, as his physician observed, in his visits, a very offensive smell in the house, he ordered the cellar under the patient's bed to be examined; where were found three barrels of beef in a state of extreme putrefaction. "So exceedingly offensive was the smell emitted from this mass of animal putrefaction, that the soldiers who were employed to remove it, were several times forced to desist, for the purpose of breathing fresh air, before they could accomplish their design." On the removal of the beef, the patient gradually mended.

3. Dr. Coffin, in a pamphlet on the danger of interments, states that—

"A man was killed by accident in Orange, New-Hampshire. In about ten weeks after the burial, the body was taken up to be deposited in a different place. Twenty persons were present at the disinterment of the corpse, which

* See also a second letter from Mr. Channing, Vol. II. p. 405.

was in a putrid state. Thirteen of these persons fell sick of fever not long after their exposure to the putrid gases from the dead body, and several of them died."

"There was no other assignable cause for this fever than these noxious gases from the dead body, the season and the place being otherwise quite healthy."*

4. In Johnson's *Medico-Chirurgical Review*, Vol. II., N. S., p. 202, there is related an instance of fever of the putrid kind, and resembling plague, produced from a putrid human body.

"An American merchant ship was lying at anchor in Whampoa Roads, sixteen miles from Canton. One of her crew died of dysentery; he was taken on shore to be buried. No disease of any kind had occurred in the ship from her departure from America, till her arrival in the river Tigris. Four men accompanied the corpse, and two of them began to dig a grave; unfortunately, they lit upon a spot where a human body had been buried about two or three months previously, (as was afterwards ascertained.) The instant the spade went through the lid of the coffin, a most dreadful effluvium issued forth, and the two men fell down nearly lifeless.

"It was with the greatest difficulty their companions could approach near enough to drag them from the spot, and fill up the place with earth. The two men now recovered a little, and with assistance reached the boat, and returned on board. On the succeeding morning they were visited by an assistant surgeon from an English Indiaman in the roads, who reported the following symptoms, viz. very acute headache, with a sense of giddiness and dimness of sight, (which had existed more or less from the moment of opening the grave;) eyes of a peculiar muddy appearance, resembling that generally observed in cases of Indian cholera; oppression about the præcordia; dull heavy pain in the regions of the heart and liver, with slight palpitation at times, and fluttering pulse; sense of extreme debility, with occasional

* I regret that the temperature of the weather is not given, though I have understood that it was hot.

convulsive or spasmodic twitchings of the muscles of the lower extremities; nausea; slight diarrhœa; rigors, succeeded by flushings of the face, neck, breast, and upper extremities; tongue white, and much loaded; pulse from 110 to 120, weak and irregular; urine scanty and high-colored; skin sometimes dry, sometimes covered with a clammy sweat. On the fourth day from the commencement of the attack, numerous petechiæ appeared over the breasts and arms; and in one of the patients a large bubo formed in the right groin, and another in the axilla of the same side, which speedily ran to suppuration. To one the disease proved fatal on the evening of the fourth day; to the other, on the morning of the fifth. For two days previously to death the gums bled freely. The symptoms were so completely similar in both the cases, that it is needless to repeat them here."

The post mortem appearances evinced a highly putrid state of the system.*

One of the two not immediately engaged in digging the grave, was attacked on the eighth day from his being on shore with "violent retching, and laboring under all the symptoms of the former patients in an aggravated degree. Was bled twenty-five ounces, and recovered."

5. Mr. Samuel Russel, of New-York, in a letter† to Dr. Mitchell, states, that two hundred barrels of herring, in a considerably offensive condition, were shipped, in July, 1801, to St. Croix, and the market being bad, were taken to Kingston, Jamaica, where they were placed in store.

"By this time the fish were discovered to be fast spoiling, and advancing rapidly through the putrefactive process. The master of the store and his clerk lived and slept in a room directly above that in which the fish were now lying and corrupting. *They both were invaded by yellow fever.*"

6. The yellow fever which prevailed in Newburyport, in 1796, appears to have been caused by putrid fish.

"Respecting the origin of the disease," says Dr. Coffin,

* See Med. Chir. Rev., Vol. II. p. 203.
† Med. Repos., Vol. V. 1822, p. 345.

"there have been but two opinions. Some have supposed it was generated here; others, that it was imported from the West Indies in a vessel which arrived in May. The captain's account is, that about twelve days before his arrival here two of his men died on board, of a putrid fever, after which he immediately cleansed the vessel by washing it with vinegar, smoking it with tar, and scrubbing the cabin and steerage floors. He threw over the clothes which the sick had worn, and their bedding. Their other clothes were locked up in their chests, and afterwards sent home to their friends in a neighboring town, without communicating any infection: the rest of the crew escaped the disease. Here it may be remarked, that if the vessel, on her arrival, had been stationed at some other part of the harbor, it would have been conspicuous, whether it brought the fever or not. But not far from the wharf at which it was unloaded, a great quantity of fish had been dressed for the West Indies, and the entrails left exposed to the air. The weather being uncommonly moist and warm, the exhalation was very offensive to the neighborhood. In one of the houses nearest the fish offal, the three first persons were seized with the disease; and within twenty or thirty rods the greater number of its victims lived. The majority of those who recovered lived in other parts of the town. Most, if not all, who had it at a distance, had frequented the infected neighborhood, but did not communicate the infection to their attendants. These are the principal facts from which the fever's origin must be determined."*

7. "In the summer of the year 1783, M. Faure, a merchant of Narbonne, in Lower Languedoc, in France, bought a house which had previously been occupied as an anatomical hall; and, being desirous of having a cave dug in the cellar, employed three men to do it. In digging, they came to the wall of a necessary, which had been the common receptacle of the remains of human subjects, and which was covered in to prevent detection; and, on extracting a few of the stones with their picks, an offensive, putrid matter rushed

* Med. Repos., Vol. I. p. 504.

through the aperture, and suffocated them. M. Faure, going to see the workmen, descended but two or three steps before he fell senseless. The neighboring people, perceiving the putrid smell, went to the house, and of nine that entered to bring out the sufferers, six died. M. Faure was removed, but died in four days; and the unfortunate laborers survived their release but a day or two.

"In the mean time, the smell increased to such a degree, as to create a pestilence, and the neighbors were obliged to remove; but a great many of them died. The Mayor of the city, being informed of the circumstance, had the cellar filled up, and the house closed. But the malignant effluvia had pervaded the town, and a great many died of the *pestis*. The disease was attended with the black vomit, but not communicated by contagion."*

8. In Washington, a small village, containing about four hundred inhabitants, situated six miles from Natchez, and occupying a high situation, remote from any swampy ground, the yellow fever prevailed in 1828, and was unquestionably occasioned by a quantity of putrid fish and hams lodged in a grocer's store. A minute and faithful history of the fever is given in the Medical Recorder for April, 1826, by a distinguished physician, Dr. S. A. Cartwright, on whose mind there appears to have existed not the shadow of a doubt that it was solely referable to the above-mentioned cause. The great length of his paper prevents its insertion in this essay.

9. Dr. Caldwell, in his appendix to Alibert, p. 61, traces the yellow fever of one season, in Philadelphia, to heaps of decaying oyster remains. The account is drawn out to a too great length for insertion, but the proofs are satisfactory to my mind.

10. In Dieppe, a city in France, a pestilential disease was produced in 1776, by putrid oysters in the shell. Cited by the foregoing author from "observations on the epidemic diseases and constitution of France."

11. "It appears, from a statement by Dr. Dick, publish-

* Med. Repos., Vol. IV. p. 245.

ed in the Medical Repository of New-York, that the pestilential fever which prevailed in Alexandria, in 1803, originated from the septic exhalations thrown into the atmosphere by a large bed of putrid oyster shells."

12. Dr. Rand, in his history of the yellow fever in Boston, relates the case of a person who was employed to remove some hides in a very putrid state upon a point of land opposite Wheeler's wharf, and who sickened and died on the third day. This history of Dr. Rand describes the masses of animal matter in a putrid state on Fort-hill, Stoddard's wharf &c. and the cases of the fever that originated from them.* "Three lads, apprentices to Mr. Manston, the cooper, by repacking some of this beef, were seized with the fever, and died."

Now, had the same number of persons been employed in removing the coffee on the wharf in Philadelphia, and all shared the same fate, is it likely that such a difference of opinion would have existed respecting the origin of the fever in that city in 1793?

13. A case is reported by Dr. Cogswell, of Hartford, of a man who was attacked with putrid fever, by passing a night in a boat containing barrels of putrid and highly offensive beef.†

14. "In 1748, at New-York, a great quantity of salt beef, partly putrid, having been purchased by poor persons, took it to their chambers, and they were almost all victims of the yellow fever."‡

15. Ship General Green sailed from Newport to the West Indies, and a great part of her crew were attacked with malignant fever. She had on board putrid fish and beef that was so offensive as to require being thrown overboard. Here I would observe, that, although the animal putrefaction was the most apparent cause, yet some may feel disposed to cavil, and attribute it to vegetable putrefaction in the vessel.

* Med. Repository, Vol. II.

† See Webster on Plague and Pestilence.

‡ Dict. des Sciences Medicales, Vol. XXX. p. 548; extracted from Valentin, pp. 121—124.

16. In the month of July, 17—, a very corpulent lady died at ——. Before her death she begged, as a particular favor, to be buried in the parochial church. She had died on the Wednesday, and on the following Saturday was buried according to her desire. The weather at the time was very hot, and a great drought had prevailed. The succeeding Sunday, a week after the lady had been buried, the Protestant clergyman had a very full congregation, upwards of nine hundred persons attending, that being the day for administering the holy sacrament.

It is the custom in Germany, that when people wish to receive the sacrament, they neither eat nor drink until the ceremony is over. The clergyman consecrated the bread and wine, which is uncovered during the ceremony. There were about one hundred and eighty communicants. A quarter of an hour after the ceremony, before they had quitted the church, more than sixty of the communicants were taken ill: several died in the most violent agonies; others, of a more vigorous constitution, survived by the help of medical assistance; a most violent consternation prevailed among the whole congregation and throughout the town. It was concluded that the wine had been poisoned. The sacrist, and several others belonging to the vestry, were put in irons. The persons accused underwent very great hardships, during the space of a week; they were confined in a dungeon, and some of them were put to the torture, but they persisted in their innocence.

On the Sunday following, the magistrate ordered that a chalice of wine, uncovered, should be placed, for the space of one hour, upon the altar; the hour had scarcely elapsed, when they beheld the wine filled with myriads of insects; by tracing whence they came, it was perceived, by the rays of the sun, that they issued from the grave of the lady who had been buried the preceding fortnight. The people not belonging to the vestry were dismissed, and four men were employed to open the vault and the coffin; in doing this, two of them dropped down, and expired on the spot; the other two were only saved by the utmost exertions of medical talents. It is beyond the power of words to describe

the horrid appearance of the corpse when the coffin was opened. The whole was an entire mass of putrefaction; and it was now clearly perceived that the numerous insects, together with the effluvia which had issued from the body, had caused the pestilential infection which was a week before attributed to poison. It is but justice to add, that, on this discovery, the accused persons were liberated, and every atonement made by the magistrates and clergyman for their misguided conduct.*

17. "The sepulchral vaults of the principal church of Dijon, having been entirely filled, in consequence of the winter of 1773, which froze the ground of the common cemetery to such a depth that it could not be opened, orders were given to remove the bodies from these subterraneous repositories. Several attempts were made to purify the air by the detonation of nitre, by fumigations of vinegar, by burning a variety of perfumes, storax, benzoin, &c. &c. and by sprinkling the pavement with a large quantity of *anti-pestilential* vinegar, known by the name of *vinegar of the four thieves*. The odor of the putrid effluvia was merely masked for a moment by these operations, and soon re-appeared with its former activity, spreading to the neighborhood, where the symptoms of a contagious fever began to appear. At this period I was consulted on the means of destroying the source of the distemper."†

The above instances are sufficient, in my mind, to establish the fact, that animal decomposition in particular stages of it, and under certain circumstances, will produce certain fevers, viz. the yellow and the putrid. Omitting farther evidence in my possession, I shall now content myself with adverting, in a few words, to what seem to be necessary conditions to give activity to the process.

1. It must be in certain stages of the process, viz. the fermentative, as Burdach of Leipsic, before mentioned, terms it; that is to say, from two or three weeks to several months, varying ,no doubt, according to circumstances of situation

* Gazette of Health, No. I. p. 2.

† Treatise on the Means of Purifying Infected Air, &c. By L. B. Guyton de Morveau, p. 25.

and state of the materials. The above instances confirm this opinion.

2. The heat must range at from not far below 80 to 100 degrees, if the materials are uncovered, though in a grave it must necessarily be less.

3. The mass must be large and moist.

4. I may remark that it seems to be immaterial whether the substance be free from salt, or imperfectly cured by it, though the evidence from the foregoing cases, and from those that are to be added in the appendix, rather goes to prove that a little salt hastens the process, and this accords with the effects of partially salted vegetables as salt marshes; and it is remarked by Webster and M. Brown, that fresh meat in water slightly salted, will corrupt sooner than in perfectly fresh water.

Let it be recollected as a matter of some weight, that the negative evidence of Dr. Bancroft and others, viz. the cemetery of St. Innocens, Dunkirk, &c. was adduced by a man who aimed at victory over what are called contagionists, and in doing so, to establish by evidence the innoxious nature of animal putrefaction, in which he has endeavored to make the most of the facts his industry could collect, and who has evidently perverted them, (in some particulars at least,) to suit his purpose; whilst the instances I have adduced as proof against him are from the pens of men who had no favorite hypothesis to establish, nor any motive to deviate from a plain statement of facts. There does appear, then, sufficient evidence for the conclusion, that yellow and putrid fevers do result from animal decomposition, though for reasons before stated, viz. scarcity of materials in the proper season of the year, and other necessary circumstances, they are comparatively of rare occurrence.

III. *The comparative influence of both animal and vegetable decomposition as a cause of fever.*—I will not undertake to say what would be the proportion of cases of fever, if decomposing animal matter were as abundant in hot weather as vegetable matter is; nor will I say, that it would then cause all the kinds of fever that I have shown in the first part of this essay, do proceed from vegetable malaria. Perhaps,

it is the adynamic kind of fevers only, as malignant, yellow and putrid, that can be produced by it. If so, there would then be a vast disproportion in the number and kinds of fevers that result from the two causes. As it is, taking into consideration the disparity as regards quantity of the two kinds of matter actually existing in a state of decomposition, I think that the cases I have shown authorize the inference, that the febrific effects of animal and of vegetable decomposition, so far as regards putrid and yellow fever, are about equal.

A NAVAL REMINISCENCE.

"All of which I saw, part of which I was."

IN the year 1804, when Preble, as Commodore of the American squadron in the Mediterranean, was gaining glory, before Tripoli, alike for himself, his officers and crews, and for his country, Lieut. Commdt. Richard Somers had command, under him, of the Nautilus, a schooner of 14 guns.

During the several fights which had previously occurred with the enemy, this officer had shown great bravery as commander of gun-boat No. 1; and, now, suggested to the Commodore, that a happy result might, possibly, be obtained, by converting the ketch, INTREPID, a captured craft of about 75 tons—the identical vessel with which the gallant Decatur had boarded, recaptured, and burned the frigate Philadelphia —into a fire-ship, and sending her into the harbor under the walls of the Bashaw's castle, in direct contact with the entire marine force of the Tripolitans.

This daring and highly dangerous enterprise being determined upon, Somers, with whom it had originated, received the orders—to which he was thus entitled—to conduct it; and the necessary preparations were promptly made by him. Fifteen thousand pounds of powder were first placed, loosely, in the hold of the ketch, and upon this, two hundred

and fifty thirteen-inch, fuseed shells, with a train attached from the *cabin and fore-peak*. Only one officer, the talented and lamented Lieut. Henry Wadsworth—brother of the present Com. Wadsworth—was to accompany him, and four volunteer seamen were to compose his crew.

All things were now in readiness, except the selection of the men—for it came to this, at last, every man on board the Nautilus having volunteered for the service. This done, it was determined, without delay, to attempt the enterprise—to succeed in it, or perish.

Two nights successively did the Intrepid move; but, owing to light and baffling winds, nothing could be accomplished. These failures, and an unusual movement in the harbor after dark on the third night, led Somers to believe that the suspicions of the enemy had been excited, and that they were on the look out. It was the general impression, that their powder was nearly exhausted; and as so large a quantity, as was on board the ketch, if captured, would greatly tend to protract the contest, before setting off, he addressed his crew upon the subject, telling them "that no man need accompany him, who had not come to the resolution to blow himself up, rather than be captured; and that such was fully his own determination!" Three cheers was the only reply. The gallant crew rose, as a single man, with the resolution of yielding up their lives, sooner than surrender to their enemies: while each stepped forth, and begged as a *favor*, that he might be permitted to *apply the match!* It was a glorious moment, and made an impression on the hearts of all witnessing it, never to be forgotten.

All then took leave of every officer, and of every man, in the most cheerful manner, with a shake of the hand, as if they already knew that their fate was doomed; and one and another, as they passed over the side to take their post on board the ketch, might be heard, in their own peculiar manner, to cry out, "I say, Sam Jones, I leave you my blue jacket and duck trowsers, stowed away in my bag;" and, "Bill Curtis, you may have the tarpaulin hat, and Geurnsey frock, and them petticoat trowsers, I got in Malta,—and mind, boys, when you get home, give a good account of us!" In like

manner did each thus make his oral will, to which the writer was witness, and which "*last will and testament*" he caused to be executed to the very letter.

It was about nine o'clock, on the night of the 4th of Sept., 1804, that this third and last attempt was made. The Nautilus had been ordered to follow the Intrepid closely in, to pick up and bring out her boat's crew, in case they should succeed in the exploit. Hence, though it was very dark, we never lost sight of her, as I had been directed, by the first Lieutenant—the late gallant Washington Reed—who commanded in the absence of Somers, to keep constant watch of her for this purpose, with a night glass.

At the end of an hour, about 10 o'clock, P. M., while I was engaged in this duty, the awful explosion took place. For a moment, the flash illumined the whole heavens around, while the terrific concussion shook every thing far and near. Then all was hushed again, and every object veiled in a darkness of double gloom. On board the Nautilus, the silence of death seemed to pervade the entire crew; but, quickly the din of kettle-drums, beating to arms, with the noise of confusion, and alarm, was heard from the inhabitants on shore. To aid in the escape of the boat, an order was now given by Reed, to "*show a light*"—upon the appearance of which, hundreds of shot, from an equal number of guns, of heavy calibre, from the batteries near, came rattling over and around us. But we heeded them not: one thought, and one feeling, alone, had possession of our souls—the preservation of Somers and his crew!

As moment after moment passed by, without bringing with it the preconcerted signal from the boat, the anxiety on board became intense; and the men, with lighted lanterns, hung themselves over the sides of the vessel, till their heads almost touched the water—a position, in which an object, on its surface, can be seen farthest in a dark night—with the hope of discovering something which would give assurance of its safety. Still, no boat came, and no signal was given; and the unwelcome conclusion at last was forced upon us, that the fearful alternative—of blowing themselves up, rather than be captured—so bravely determined upon, at the outset of the

enterprise, had been as bravely put in execution. The fact, that the Intrepid, at the time of the explosion, had not proceeded as far into the harbor, by several hundred yards, as it was the intention of Somers to carry her, before setting her on fire, confirmed us in this apprehension; still, we lingered on the spot till broad day-light—though we lingered in vain—in the hope that some one, at least, of the number, might yet be rescued, by us, from a floating plank or spar, to tell the tale of his companions' fate.

To our astonishment, we learned next day, that Lieut. Israel, a gallant youth, who had been sent with orders from Commodore Preble to Somers, after he was under way in the ketch, had accompanied him in the expedition, and had shared his destiny.

Such was the end of the noble fellows, who, a few days only before, on board their own gun-boat, No. 1, had beaten six of the enemy's fleet, of equal force with themselves, immediately under the guns, and within pistol shot of a shore battery: an achievement, accomplished only, in their peculiar position, by backing astern, and keeping up an incessant fire of canvass bags, filled with 1,000 musket balls each, till our gallant commodore, in the "Constitution," stood in to take the fire of the battery, and thus enable us, under his cover, to obey the order, "*to come out of action*"—a signal which had already been flying more than an hour, and which Somers, *at first, would not, and at last,* (from the fierceness of the fight,) *could not see.*

R.

HINTS ON MANNING THE NAVY, ETC. ETC.

By a Citizen—An honorary member of the U. S. Naval Lyceum.

IN my last communication, the question of manning the navy, was reserved for a separate number of the Naval Magazine. This point I now propose, briefly, to discuss, though I am still compelled to urge the want of sufficient time to do justice either to this publication, or to the subject.

As respects all labor, America is placed in a situation different from that of older and more populous countries. The demand for men exceeds the supply, and they who cannot obtain what they conceive to be a suitable remuneration for their services in one pursuit, seldom fail to seek it in another. It follows, that there is rarely a continued glut of seamen, in any one of our ports, as is sometimes the case in Europe; for, after the level has been restored, by the men separating and going to other parts of the country, should the demand not be increased, the foreigners go home, while our own people turn their attention to the land. This amphibious character is quite common to the American mariner, more particularly among the fishermen and whalers, and it should always be borne in mind, in estimating the resources of the country.

The occasional scarcity of mariners in this country, does not proceed from any indisposition to the sea, or to the want of native seamen, but to the suddenness and frequency of commercial changes, and to the circumstance that men are never obliged to throw themselves entirely on the liberality of employers. A steady demand is certain to obtain the required supply. Were foreigners excluded from our ships, this supply would soon be purely of home growth.

In such a state of things, it is idle to expect that the country can ever furnish the men necessary to a sudden armament, unless the government resort to continued and systemized means of raising mariners, or without as sudden

a check to the commercial navigation, which, by throwing men out of their ordinary employment, would place them, in a degree, at the disposal of the country. We have, then, the choice of knowingly injuring the ordinary navigation of trade, by stripping it of its men, each time there shall be occasion for a naval equipment larger than common, or of devising some expedient that shall provide for one branch of the common interests, without doing material injury to another. The wisest, and the most statesman-like means of effecting this great end, is by resorting to a system that shall create within itself an excess equal to the probable contingency, and which will also have the merit of gradually driving the foreign seamen from our ports. The latter *desideratum* can best be accomplished in connection with a plan for regularly manning the navy, for it will never do to tax a growing navigation, by insisting on the exclusion of foreigners, until native substitutes have been secured.

In this communication, I can do little more than give an outline of the plan I would propose. It is subject to an infinity of details, and it is to be expected that practice would suggest many improvements on all that the most ingenious theories might devise. The reader, moreover, will make the necessary allowance for the hurry with which this article has been prepared.

My project embraces a regular department for the enlisting and drilling of men. By department, however, I do not absolutely mean any bureau in the civil branch of the service, (although there might be an advantage in such an arrangement,) but simply, that a military separation should be effected between those who will control this interest, and those who shall be employed in the more ordinary duties of the navy.

Let, then, a captain of proper experience, temper, and habits of discipline, be ordered to assume the command of the recruiting and drill service. A requisite number of commanders, lieutenants, masters, passed midshipmen, and midshipmen, should be put under his orders. To these it would be necessary to add a liberal allowance of other warrant, and of petty officers. Particular care should be had in the selection

of these officers, and it might be well to tempt, by liberal wages and ample appointments, decayed ship masters, or mates, men of professional skill and suitable characters, to enter for this particular branch of duty.

A port should then be selected for a place of general rendezvous. There are some important considerations which would point out Newport, as the most eligible station for such a service; others, however, would induce one to give a preference to New-York. After a careful revision of the advantages and disadvantages of both, I lean to the opinion, that the objects of the system would be most advanced, by keeping the men in a port where the active operations of seamen would be constantly before their eyes.

When these preliminaries were arranged, and the party of officers and petty officers was properly organized, selected agents should be sent into the *interior* to enlist. These enlistments might be made for three, four, or five years, in addition to the six months of drill, according to the wants of the moment. The pay should be equal to that of the army, in addition to a necessary amount of clothing; care being had to make the latter neat, but strictly professional. Young men, except in emergencies, should always be preferred. It is believed that there could be no great difficulty in collecting, in this manner, any desirable amount of physical force. The love of enterprise and of novelty, a longing for the sea, and the other well known impulses which stimulate the young and ardent, would at all times put at the disposal of the government thousands, and, if required, tens of thousands, of the active population of the country. The navy would be preferred to the army, as offering a wider field to enterprise, and furnishing greater novelty, and we know that large armies have been raised by very inefficient means, from a population of not more than half the amount of that of the present day.

The extent of these enlistments would be regulated by the wants of the service. It might be well to commence with some four or five thousand men, to which one or two thousand should be added annually, to meet the vacancies created by the periodical discharges.

As fast as enlisted, the men should be transferred to local stations; and thence, in bodies, to the general station; where previous provision would have been made for their reception. As a matter of course, the extent of these provisions would be regulated by the extent of the experiment. A ship, or ships, according to circumstances, should be placed under the order of the captain commanding this branch of service. It would be better, if there could also be a station on shore, connected with the vessels. Either of the small islands of the port of New-York, would be well suited to such an object; the constant communication between the vessels and the land, by means of boats, forming a useful part of the drill.

On the arrival of a party of recruits, instead of being turned over to the officers of a cruising vessel, to run the chances of the service, they should be put into the hands of those whose sole business it was *to prepare them to be of use*. No class of men have hitherto been so little treated like reasoning beings, as sailors. Their peculiar knowledge is to be taught by imparted instruction, as well as any other, and yet, nineteen in twenty are left to acquire it, by long and laborious struggles in active life, by awkward imitation, and by such information as can be gleaned from a mate or a shipmaster, in his moments of condescension or good nature. A man may certainly teach himself mathematics, taking sufficient time and using severe application; but we all know that he can be taught by another with greater ease to himself, and much more expeditiously. Any adult could be taught the combinations of letters, and the nature and uses of words and syllables, in six months, and are we to believe the same man cannot be taught, in the same time, the combinations and uses of the ropes of a ship, to such a degree, that, under proper direction, he might make a prompt and intelligent use of them? I have seen men who have been a twelvemonth, or even longer, in a ship, without knowing how to make a *flat-knot*, and yet a man of average intellect can be *taught* to make a *flat-knot*, and to understand its advantages over a *granny*, in such a way as never to forget it, in half a dozen lessons of five minutes each. By seeing a

hundred others around him constantly employed in learning the same things, by periodical examinations and periodical practice, one month would enable the recruit to make every knot and splice in use on board a ship. Soldiers undergo a previous drill, as a matter of course; mechanics have their regular instruction; all handicraft arts and sciences are taught, but the knowledge of a sailor, in this country in particular, is left to be matter of fortuitous acquisition.

To give a summary of my system:—I would put the two *ends* of a rope into the hands of the recruit; it would show him that by bringing these ends through the *bights* so as to leave them next the *standing parts*, a knot is made that will neither *draw* nor *jam;* and I would show him the advantages of such a knot over one that will *draw*, or *jam*. From a *flat knot*, I would proceed to a *bowline;* to *half-hitches; timber-hitches; clove-hitches;* up to the most complicated uses of a rope, according to the dexterity and aptitude of the individual. *All* should be taught the commoner duties; *the willing and clever* should be classed, and pushed beyond them.

To particularize, in another branch of duty. I would rig a yard on land, at a reasonable height from the ground, and so near a stage that the officers could walk conveniently in front of it. Here the several acts of furling and reefing should be first performed, in such a way that *instruction* and *explanation* might go hand and hand, with *exercise*. *One* reef taken in this way, deliberately and with kind instruction, would teach a recruit more than twenty taken aloft, with an effort to see how soon the sail could be shortened. First learn to do well, intelligently, and thoroughly; and then learn to do expeditiously.

In short, the whole system is based on the following undeniable truths: viz. that man is a reasoning animal; that a sailor is a man; that he can acquire sooner and better, by kindness and care, and imparted instruction, than by the severity, (necessary severity if you will,) imitation and *divided duties* of a cruising ship; that six months of steady instruction would teach a *raw-hand* more than he would learn in any other way, in years; that the Lancastrian method of in-

struction can be applied to this art, as well as to the art of reading, or even better, it being purely *practical* and *visible;* that the best men often get disgusted with the sea merely on account of their ignorance, the contempt that awaits ignorance among seamen, *and the necessity that duty at sea should be chiefly done by those who already understand it;* that raw-hands do not learn at sea, because they hesitate about acknowledging their inferiority; that the duty of an ordinary seaman, on board a man of war, cannot only be learned, but *well learned*, in the course of six months' careful and intelligent instruction, while it is rarely learned in three years in a cruising vessel, and that the man, who goes on board the latter, prepared by a previous drill, which has been conducted kindly and with the sole desire to teach, will steadily advance in knowledge by practice, and will, in fact, *commence his cruise a better seaman, than the landsman, under the present arrangement, usually ends it.*

It may admit of question, whether the ordinary rendezvous for the seamen, ought, or ought not, to be connected with an experiment like this. My own opinion is in favor of the union of the two under one head, or, at least, of keeping a proportion of the seamen with the landsmen, until their services should be required at sea. They might be used as subordinate instructers, in the intervals. It may suit the prejudices of some to deride the idea of converting a tar into an instructer, but this objection is of a piece with all those that proceed from bigoted and unreflecting professional habits, and is not entitled to much respect. Greater obstacles than this, have been overcome by authority and example. Thirty years since the sea officer who manifested a taste for the arts that this magazine is established to promote, would have been the subject of ridicule. No class of men have undergone greater modifications of character within my time, than seamen, whether their lot be cast on the quarter-deck, or on the forecastle, and yet ships were never better handled, or better taken care of, no battles better fought than they are to-day. The old Trunnions of the eighteenth century, would be several glasses in disposing of a sloop or a small frigate, a job that the men of our time usually get through with, in thirty or forty minutes. God has created

man with a portion of his own high intelligence, and there can be no more certain sign of delusion, or of mistaken prejudice, than to discard the use of a right reason, in controlling any one of the ordinary affairs of life. Treat a sailor as a reasoning animal, and he will cultivate the faculty; treat him as one without thought, and he readily degenerates into brutality and ignorance. The ancient unfavorable character of seamen, was the result of their treatment, and their treatment the result of that want of sympathy which grew out of the transient relations of merchant vessels, in which most mariners learn their trade and form their characters.

It has been said, in the last number of this publication, that large ships require a less proportion of seamen than small. Most of the men drilled in the manner just described, at the end of six months, would be fit to rate as ordinaries, and a fair portion of them would soon be qualified to rate as seamen. A few, no doubt, would become petty officers before their terms of enlistment had expired. Such a system, however, ought to be supported by the commanders of cruising vessels, who should be instructed to advance all whose conduct and improvement would justify the measure. The apprentice system would prove less efficacious, because it could not well be conducted on a sufficient scale to meet the current wants of the service, no ship-master being willing to take a greater physical force than he has need of. Boys, however, might be enlisted for a longer period, say seven years, and the government might engage to give them additional advantages and a higher class of instruction.

It would be a great addition to the utility of such a scheme, were a frigate or two attached to the station, with orders to cruise on the coast during the fine season. As there would always be in readiness many supernumeraries, in time of peace, these vessels would be reasonably efficient, even with such crews, and might act as part of a home squadron. The men would always form a corps to throw into the forts on an emergency, and, as they would also be exercised with small arms, they might be brought to act on the coast, in the event of a rising of the slaves, or even on still graver occasions. As their times expired, they would either re-enter the service as seamen, or join the mercantile marine,

for no man could, or rather would enlist twice as a landsman. In this manner the wants of the navy and of commerce might be supplied, a thing not to be expected, in the present state of the country, without recourse being had to some such artificial means.

The truth of the principle rests on the fact, that the supply of men in a nation situated like our own, will never naturally exceed the demand, and this system is intended to create a demand in a form that shall act as both cause and effect.

Much might be added to enforce the usefulness of the experiment, but at present, little more than the general suggestion can be given. Before closing this article, however, I ask leave to extend it to another subject, which is also of great interest to the navy, and more particularly so, just at this moment. I allude to the gradations of rank among the officers, which are in danger of being so confounded, as to impair the discipline of the service, and without discipline, all other expedients to create a marine will be rendered of no avail.

It is much easier to prove that our imitation of England is natural, than to prove that it has always been wise. As respects the navy, high political considerations have compelled us to reject some of the strongest incentives to meet hardships and danger, which are used in that country; a mistaken and ill-judging prejudice has curtailed our rewards on other points, and, always adhering to imitation as far as we have gone, we have been left with only a miserable remnant of the English system. The consequence has been that, in this country, men are required to devote their lives, their time, and their hopes, to the service, with fewer inducements than are held out in any other maritime nation. How far this nakedness of self-devotion is just, it is not my intention to inquire; but I feel certain that nothing would be easier than to show it is neither far-sighted nor politic. There is no man, at all likely to do credit to a service, who would not prefer its honors to its pecuniary rewards. Money is a treacherous motive to keep before the eyes of a military man, for, however necessary to his wants, when it gets to be the sole incentive, it deadens his sense of honor, paralyzes his chivalry, and reduces him to

the level of those vulgar feelings, which tempt men into calculations that do any thing but point the way to personal sacrifices and glory. Money should be given, and given freely, as a minister to the necessities of life, and to discharge the obligation due from him who is protected to him who protects; but evil be the hour, when the naval Captain shall live only for his pay!

In England, the naval officer has constantly before his eyes the incentives of social rank, in the various degrees of knighthood, with many minor means of distinction that have been devised to quicken his exertions, holding before him the peerage, with its lasting power and hereditary consequence, as the highest goal of his ambition. Most of these inducements belong to the class which, from high political considerations, have been very properly rejected here. But the English officer has, in addition, many other and strictly professional objects to aim at, as the rewards of his toils and dangers. England has no less than nine distinct gradations of rank among her admirals alone, besides three professional dignities, that are reserved as rewards for success and long services; all of which are so many inducements unknown to this country. The American naval officer, until quite lately, had but three of those enviable epochs, which are dependent on promotion, to cheer the self-denying services of an entire life. From a midshipman, he became a lieutenant; from a lieutenant, a commander; from a commander, a captain; when that star, which true policy tells us should always shine before those from whom we expect severe sacrifices, set for ever! Limited as were these inducements, and injurious to discipline, as the system necessarily became, by crowding the whole list into four grades of rank, it had not (nor has it now) the redeeming merit of placing him who had gone through the long probation, on a level with men that, in other services, commenced life with himself; men, too, perhaps, whom he had bravely and skilfully overcome, in fighting the battles of his country. It may yet be the hard fortune of *Captain* Hull to fall in with *Admiral* Dacres, on service.

It is not an easy matter to impress on one in civil life the importance that ought to be attached to gradations of military rank. The respect that is paid to a commission is the

basis of all authority, and, although a difference in number, or of date, confers command, every one, in the least acquainted with service, knows how to appreciate the additional deference and weight, that is given to authority, by positive rank.

Nor is this all. In this country, the departments find it no easy matter to enforce discipline at all, for not an officer is cashiered, that strong political influence is not brought to bear on his restoration, or an officer passed in promotion, that a party is not made to "see him righted," as it is termed, although he may be even unfit to retain the commission that he actually holds. When promotion occurs but twice or three times in a life, the event is of sufficient importance to induce even the indolent and the incompetent to make a rally to recover the ground that has been lost, while the rarity of the occasions, and the importance of the crisis, tempt their commiserating friends to lend them all their aid. This is an evil that can be greatly lessened, if not absolutely cured, by increasing the number of grades in the service, and by diminishing the motives for an interference that is too often unreflecting, and, quite frequently, as injurious as it is indiscreet.

Within the last ten years the youth has been put on board ship, on trial, receiving a warrant at the end of a few months. The probation is not long enough, nor is there sufficient reason for issuing the warrant so soon. He who conducts himself properly, is just as certain to receive it, as, at a later day, he will be to receive his commission. The first six years of a young man's service usually form his character, and it is all important that he should be constantly kept under the checks and stimulants of preferment. With a view to the general effect on the whole service, therefore, and with due deference to those who are charged with its interests, I beg leave to suggest the following plan.

Let the youth, on entering the service, be rated as a Midshipman, by letter of appointment, as at present. At the end of two years, on *testimonials of character*, let him receive his warrant as a Midshipman. At the end of two more years, on like testimonials, let him receive a warrant as

a Master's Mate, with a slight increase of pay; the Master's Mate to rank all the warrant officers forward. At the end of two more years, or of six in the service, all of which should be counted as attached afloat, let him be examined, and receive a warrant as a Passed Master's Mate. The duties of a mere Midshipman, and those of a Master's Mate, are so very distinct, that I think the change of name called for, and the latter more suitable to the pride of a young seaman.

A question may now arise, whether it would be best to have three classes of Lieutenants, or two. I would propose three, of which one should fill a rank between the present Lieutenant and the Master; one should be of the present rank; and one of a rank between the present Lieutenant and the Commander. They might be entitled First Lieutenants, or Lieutenants Commandant; Lieutenants; and Signal, or Junior Lieutenants. I prefer Signal Lieutenant, because it is a nautical term, and one already familiar to the service. The Commander and Captain would follow. It would be an improvement were the rank of Post Captain to be added. The grades (excluding those of Commodore and Master) would then stand as follows:—

1. Acting Midshipman.
2. Midshipman.
3. Master's Mate.
4. Passed Master's Mate.
5. Signal Lieutenant.
6. Lieutenant.
7. First Lieutenant, or Lieutenant Commandant.
8. Commander.
9. Captain.
10. Post Captain.
11. Rear Admiral.
12. Vice Admiral.
13. Admiral.

Excluding the Flag Officers, whose numbers and ranks must be increased with the increasing wants of the service, or the service will never attain the dignity it deserves or extensive usefulness, there would be eight distinct preferments between

the novice and the captain, instead of the five that now exist. The present Capt. Page, who is just promoted, entered the service on the 17th December, 1810. During twenty-five years he has been twice promoted. Capt. Stevens, who is just made a Captain, entered the service the 8th February, 1808. His luck is a little better, the war having given him a lift. He has been three times promoted in twenty-eight years. Perhaps thirty years may be taken as a fair average for the time passed, and to be passed, between the grades, counting from that of a Midshipman to that of a Captain. The introduction of Acting Midshipmen and Passed Midshipmen, has increased the intermediate steps to five. Were the time equally divided, this would give six years in each rank; but two of these steps occur in the first six years, leaving intervals of eight years between those which succeed. Under the proposed change, the average periods between the promotions would be less than four years, and more equally divided between them all than at present. Captain Breese, who is just promoted, has been nineteen years a lieutenant! Under the proposed system, he would have been three times promoted to reach his present rank, instead of once, as has really been his hard fortune. Any one can appreciate the effect on the hopes, character, and ambition of the officer, by cheering his progress through life, with these occasional rays of sunshine. But this is not all; *each promotion is an ordeal of character*, and those temporary reformations and impulses which we now see, as men draw near to the head of their list, by being more frequent, would become more permanent; the department would hesitate less about rigidly doing its duty; and friends would be more apt to refer the failing applicant to the succeeding year, and to a change of conduct, as the wisest and most speedy means of recovering his lost ground.

Officers of different grades rarely quarrel seriously, and when they do, courts usually decide between them. The tone of discipline would be higher, when enforced by distinct rank, and a life and a zest would be given to the service of which it now stands greatly in need. The Passed Midshipman who shall be promoted this winter, will have to look forward some fifteen or twenty years, before he can expect farther

advancement, but, justice being first done to those who have already endured the long probation, by raising them to the ranks they have fairly earned, how different would be the situation of the young Signal Lieutenant who had just received his commission? In three or four years he might expect another.

The rank of Commodore, as an acting or brevet rank, is particularly useful. It gives the department the privilege of selecting its agents, for critical duty, a privilege that is indispensable to a proper administration of the service It might, perhaps, be well to commission two or three Commodores, merely to establish the rank, but it is a grade that ought to be dealt tenderly with. In all cases Captains, or Post Captains acting in command of squadrons, should be rigidly made to drop the title on lowering their broad pendants. It is, and ought to be, a *brevet* rank, suited to emergencies. The title should never be permitted to be used at all, nor any other than a distinguishing pendant hoisted, except under orders from the department. These distinctions, which may appear subtle and over-nice to landsmen, are useful to discipline, powerful incentives to exertion, and indispensable to dignity.

The officer has his regular, and his accidental or contingent duties. Of the first, the Acting Midshipman, and Midshipman, would perform the boat service and other ordinary duties of the rank; the Master' Mate, the boat duty of his proper station, his watch, hold, and birth-deck duties, as to-day: the Passed Mate, a grade that would be much less numerous than it now is, promotions being more frequent, would have the holds and spirit-rooms in large ships, would act as Masters and Assistant-Masters, and generally would do the duty of the present Passed Midshipmen. The Signal, or Junior Lieutenants, would act as signal officers in large ships, second officers of watches on board two-decked ships and frigates, and as Lieutenants in smaller vessels. The Lieutenants would act as Lieutenants of the watches in large vessels, and as first Lieutenants in sloops, brigs, and schooners. The Lieuts. Commandant, as first Lieutenants in ships of the line and frigates, as commanders of brigs and schooners, and as first Lieutenants in yards, &c. The Commanders would have the sloops and their present

shore-duty. The Captains would take the frigates, except in particular cases, and the Post-Captains the ships of the line, the navy yards, and the squadrons that did not require a flag.

This may sound like innovation, and there is no doubt that it involves great changes in the present system. But the question we are to ask is, whether these changes will not be improvements. Experience will sustain me in much the greater part of what is here proposed. The probation of the midshipman is already established; but it has the fault of attempting a thing it does not accomplish. Less than two years is scarcely a probation at all, and the time the youth is without a warrant scarcely makes him look forward to its possession as preferment. Master Mates are known to the service, but their appointments lose all their value as promotion, and as professional ordeals, by their irregularity and inconstancy. One of the most essential benefits of the station is lost; that of incentive, through promotion. The duty of a Midshipman is proper for a lad; but the Master's Mate performs functions that require knowledge and reflection; his duty is proper for a man. The Passed Mate would merely be the present Passed Midshipman. The Signal Lieutenant exists in fact, in a variety of forms; as in the duties of a signal officer, of which every vessel under the immediate orders of a flag must have one; as in the Lieutenants of forecastles; and all other Lieutenants who have not watches of their own. The Lieutenants would be the Lieutenants of the present system; and the Lieutenants Commandants, or First Lieutenants, are practically known to the service already. This last is perhaps the change most called for, of all others. In the event of the Captain's death, or inability, the command would devolve on an officer superior in rank to those under his orders. The principal benefit to be obtained by making two classes of Captains would be in increasing the ordeals of character as men drew near to those high and responsible grades, on the proper performance of whose duties, efficiency of construction, discipline, national aptitude and other maritime qualities, must, after all, rely for opportunities and power to exhibit their excellence. A first-

rate commander would make more out of an indifferent fleet, than an indifferent commander would make out of a first-rate fleet. In this country, where large sinecure lists of officers, that will admit of selection, can scarcely be expected, it becomes of the last importance that improper or incompetent men should not be allowed to take post for their flags.

The navy can be made the most efficient means for maintaining the national rights, and the national character, that this people possesses; it can be made a means of defence that no other power would presume to despise, or, within our own waters, would presume to brave; it can easily, and it ought to be made to give us as absolute command of the North American ocean, as England ever had over her own narrow seas; it can be made to extend the protection of the flag of the republic to the remotest corner of the world, and, in the next fifty years, to render this Union, under Providence, capable of maintaining, in face of the whole earth, its own just and generous principles of civilized intercourse. But to effect these high ends we are not to sleep on our posts, or to lend our ears to the syren notes of universal peace and general philanthropy, which it is the fashion to sing, that others may be lulled into security, while those who practise the deception overlook no occasion to strengthen their own means of offence and defence, in readiness for the great war of opinions that the men of this generation will yet witness, convulsing Christendom to its centre.

I will sum up all in a word, by presenting the governing principle in each of the propositions that have been made: In a country in which the demand for men, unless recourse is had to extraordinary means, never can exceed the supply, it becomes the duty of government to produce this supply, by resorting to measures to create a demand, there being the absolute certainty, that, for a long time to come, one will be limited by the other. This is the whole case, so far as principle is concerned, in respect to the means of manning our ships. The policy of changing the ranks, is dependent on a principle equally clear. Gradations in rank are indispensable to discipline, and the very fact that all the quarter-deck sea-officers, including the midshipman and

the commodore, are now virtually crowded into the present narrow compass, ought to lead us to distrust the wisdom of the present arrangement. The proposed alterations add the strong incentives of progressive preferment, to the security that will be produced by sustaining authority and confirming discipline, by the introduction of new, and what are believed to be useful, grades.

In my former communication, it was assumed that there could not be much difficulty in obtaining the crews of fifty sail of the line, during a war that should throw seamen, to a certain degree, out of employment; but, in this article higher ground has been taken, as it ought to be an object of national policy to secure the defence of the country, without essentially injuring any of the more material branches of its industry. Should an expedient like the one proposed be adopted, it is thought a force might be put afloat that would enable the ordinary navigation to go on, by calling in the aid of such wandering seamen of other nations, as are ever ready to serve for a liberal pay. Such has always been the policy of England, in her wars, and such ought to be ours.

J. F. C.

MISCELLANY.

CRITIQUE ON PHRASES ADOPTED BY USAGE FROM THE FRENCH LANGUAGE.

IT has been well remarked, in the last number of the Naval Magazine, that a sea officer ought to be qualified to communicate his ideas, in language suitable to his station. The arduous duties of the profession, may not be very favorable to acquiring the art of fine writing, but there is no reason why a gentleman in the service should not, under ordinary circumstances, acquit himself, in this respect, as well as most gentlemen on shore. The duties of a commander frequently call for the management of delicate official correspondences, and it is every way desirable that all who aspire to rank, should, at the same time, aspire to the qualifications that are necessary to fill that rank with credit.

These remarks have been elicited by recurring to mistakes that too frequently find place in the writings of those who ought not to commit them, and which have a direct connection with the every-day language of nautical men. I allude to the abuse of the common French terms, "*chargé d'affaires*," "*hors de combat*," "*esprit de corps*," &c. &c. &c.; which are quite frequently written "*charge* des *affaires*," "*chargé* des *affaires*," "*hors* du *combat*," and "*esprit* du *corps*." *De* is a preposition signifying *of; du* is what the French call an *article composé* or a compound article signifying *of the*, being used only in connection with masculine nouns, in the singular number; as *de la* is used in connection with feminine nouns, in the singular. *Des* is the same word varied to agree with the plural of both genders. "*Combat*" and "*esprit*" being both masculine nouns, certainly require *du*, in all cases in which the composed article, singular number, ought to be used at all; as they would require *des* in the plural. The mistake is in supposing that "*hors de combat*"

is a common phrase, composed of three words, when it is what the French call a *phrase adverbiale*, or, in plain English an *adverb* composed of three words. "*Esprit de corps*" and "*chargé d'affaires*" are merely compound words, like "ship-master," "cable-tier," or "jib-boom" in English, and can either be the objects, or the nominative cases, of verbs.

To analyze the first of these phrases:—

"*Esprit*" means "spirit," "temper" or "disposition." It also means "talents," "wit." It is a noun. *De* is a preposition, meaning *of* or *with*. *Corps* is a noun, signifying "body" as applied to an animal, or a body of men. Literally translated "*esprit de corps*" means "spirit of corps," and "*esprit* du *corps*" "spirit *of the* corps." "Spirit of corps" having no exact meaning in English, those who are imperfectly acquainted with the French, adopt "*esprit* du *corps*," or "spirit *of the* corps," under the impression that this alone can be right. Both are certainly good French, though they mean very different things. "*Esprit* de *corps*" being a compound word, (*mot composé*) in a grammatical sense is but a single noun; it can be either the nominative, or the object of a verb. "*L'esprit* de *corps de ce régiment est admirable*," is perfectly good French, as its translation "the *esprit* de *corps* of that regiment is admirable," is perfectly good English; the compound word "*esprit de corps*" having been adopted into our own language. "*L'esprit* du *corps est admirable*," is also good French, but the use of the compound article *du* renders it necessary to suppose some particular corps to be its immediate antecedent. One is general, the other special. One would be used to signify a general pride and self-respect in a body of soldiers, sailors, players, merchants, or any other set of men, while the other would have a direct reference both as to the "spirit" and as to the "body" of men. If a king were to inquire of a colonel, if he might depend on his regiment, in a crisis; the answer might be either "*oui; l'esprit* du *corps est bon*," or "*non; l'esprit* du *corps est mauvais*." "Yes; the spirit *of the* corps (or of the particular regiment in question) is good," "it is loyal and may be depended on;" or "no; the spirit *of the* corps is bad," and cannot be depended on. On the other hand, were a king to

ask a colonel if his regiment had a regimental or a professional pride, he would inquire "*son esprit* de *corps, est-il bon?*" and not "*son esprit* du *corps, est-il bon?*" as in the former question. In the first case, *esprit* would be the nominative case of the verb "*est,*" "*corps*" being governed by it; whereas in the second case, the whole compound word "*esprit* de *corps*" would be the nominative of "*est*" or "is."

The same is true of "*chargé d'affaires;*" (*d'*) being the elision of *de.* "*Chargé*" is a past participle signifying "loaded" "charged," and "*affaires*" is a noun in the plural. "*Chargé d'affaires*" means, "*charged with affairs*" while "*chargé* des *affaires*" means "*charged* with the *affairs.*" The first is general, the second definite. The first means a particular officer; it is a title; and in this sense like "*esprit* de *corps*" has been adopted into English; but "*chargé* des *affaires* is part of a sentence, and to be comprehended must allude to something else. We can say "*un esprit* de *corps,*" and "*un chargé* d'*affaires;*" "an *esprit* de corps" "a *chargé* d'*affaires;*" but we cannot say "*un esprit* du *corps;*" "*un chargé* des *affaires;*" "*a* spirit *of the* corps," "*a* charged *with the* affairs." It is good French to say "*l'homme quit est chargé* des *affaires de sa nation.*" "The man who is charged *with the* affairs of his nation;" but in this case "*chargé,*" as a participle, agrees with "*homme*" its noun. It must be remembered that *de* and *des* mean *with,* and *with the,* as well as *of,* and *of the.* Thus the French say "*qu'avez-vous fait* de *mon chapeau?*" "What have you done *of* (or with) my hat?"

"*Esprit de corps,*" "*chargé d'affaires,*" and, perhaps "*hors de combat,*" have all become English terms; at any rate, all may very well be used in English writing; but it is not easy to see on what occasion, except one like the present, "*esprit* du *corps,*" "*chargé* des *affaires*" or "*hors* du *combat,*" can properly be introduced into an English composition, except as a quotation. When the officer lowest in rank in diplomacy is meant, "*chargé* d'*affaires*" should always be written; when professional pride is meant, "*esprit* de *corps;*" and when it is desired to say that a ship is crippled, it is necessary to write "*hors* de *combat.*" The ship that should sheer out of the line, would be "*hors* du *combat,*" "out *of the* fight," though *un-*

touched; whereas the ship that could resist no longer, would be "*hors* de *combat*," or *unable to fight*, though lying under the broadside of a three-decker. In short, "*hors* de *combat*," is a phrase used as an adverb, which, by convention, means, *disabled;* while "*hors* du *combat*," is part of an ordinary sentence, containing a preposition, a compound article, and a noun, and means literally, *out of the combat.*

Charge des *affaires* is seldom used in speech, but it is sometimes written. It is most frequently an omission of the accented e final, (é), though it is sometimes supposed to be correct. *Charge* is made in several of the moods and numbers of the verb *charger* "to charge," and can only be used in conjunction with its proper nominatives. "*Je charge* des *affaires*," "*I charge with the* affairs," as part of a sentence would be correct, though something else must be added to complete the meaning.

To conclude—"*hors* de *combat*," and not "*hors* du *combat*," means, disabled; "*chargé* d' *affaires*" is the lowest rank in diplomacy, and not "*chargé* des *affaires*," or, "*charge des affaires*," or "*charge d' affaires*," the accented *é* being absolutely necessary, and "*esprit* de *corps*," means professional pride, and not "*esprit* du *corps* which means the temper or disposition of a particular corps," on any named point, as relates to disaffection, or loyalty. On some occasions, however, it means *ability*, as the wit or the talents of a corps of writers.

"*Aide* de *camp*" is another similar case; "*aide* du camp" being wrong; but the subject shall be resumed in reference to other phrases. ORTHOGRAPHY.

EXTRACT OF A LETTER

From W. B. LEWELLYN, Esq. U. S. Consular Agent, at Salonica, dated July 13th, 1835, to the corresponding secretary of the Naval Lyceum, announcing that he had transmitted, via Constantinople, 22 Arabic, Turkish, and Persian manuscripts, which he had procured, as a present, for the Naval Lyceum.

"These rare, and, in some instances, precious relics were on the point of being purchased for enriching the

Vienna cabinet; but the talented owner of them, from his intimacy with me, and not being on friendly terms with the Austrian consul here, declined ceding them to that officer, and accepted the proposal I made him, of making an exchange with me, for objects of a different nature. I could not, for a moment, hesitate in securing these works, as the opportunities for procuring them are not only becoming extremely scarce, but the price demanded is excessively dear, although readily paid by connoisseurs. These manuscripts are accompanied by a catalogue, containing the names of the authors and the contents of each book. Some of the works may possess an additional value, in having marginal notes and commentaries by other writers of a less remote period than the original date, and occasionally inserted by the authors themselves. I shall take the liberty of soliciting Commodore Porter to do me the favor of forwarding them to America, as the existence of the plague at Smyrna might, in sending them there, prove injurious, and cause farther injury, in addition to that which they have already received, through time, and the bad usage of their former possessors."

TRANSLATION OF THE CATALOGUE IN FRENCH,

Referred to in the above letter of Mr. LLEWELLYN.

No. 1. Gulistan—A Garden of Roses, by Scheich Sady de Chivaz, containing eight chapters, to wit: Counsel to Kings; qualities of Dervishes; resignation; the utility of silence; Love and youth; Impotence and old age; education; suitableness of discourse.—Persian.

2. Kitab l'heddie—The book of good precepts; bearing the farther title of precious book, the ocean full of waves; the book of great value and great merit, which admonishes of danger, and which affords evident proof of the existence of a Supreme Being, containing 55 chapters, upon chastity, prayers, alms, youth, pilgrimage, marriage, attachment, divorce, emancipation, limits, &c.—Arabic.

3. Tearifat il fikh—On jurisprudence.—Arabic.

4. Poems of Mesnevi—The name of this poet is very celebrated among the Musselmen.—Persian.

5. Another volume of the same work.

6. Abon Henifé—The name of a savan, occupying the first rank among Mussulmen theologians. This manuscript merits farther attention, from its bearing the seal of the famous Djezzar, Pasha of St. John d'Acre who signalized himself in its defence against Napoleon.—Arabic.

7. Kitabl djévahir al behiet—The book of precious jewels, with the commentary upon forty problems, by Scheich Mouhammed Oeli-lddin Schebelrivi.—Arabic.

8. Arabic and Persian Dictionary, by Scheich l'Imam Abon Hassan ali ben Mouhammed al Fendjé Kerdi, of the year 649 of the Hegira, commencing 1251 years ago. Consequently the manuscript is 602 years old.

9. Arabic Grammar.

10. Pamphlet by Tsagontzi: containing reflections upon nature, upon man, upon animals.—Arabic.

11. Mussulmen prayers.—Arabic.

12. Syntax of the Arabic language, by Ahmed ben Ali ben Massoud.—Arabic.

13. Meditations of Joussouff Effendi, upon several prophets, in verse.—Arabic.

14. Touhfet l'moulouk—The present of kings, a resumption of the work of Abon Henifé—Arabic.

15. Dogmas of Abon Henifé.—Arabic.

16. Pamphlet of Hafizjet Daldin Sejonti.—Arabic.

17. The History of the Caliphs and of the dynasty of the Osmanides.—Turkish.

18. Translation in Turkish of some poems of Mesnevi. —Turkish.

19. Models of Turkish letters.—Turkish.

20. The Concealed Pearl, or judicial pieces.—Turkish.

21. Mystic Poetry of Kha Kani.—Turkish.

22. Abridgment of the History of the Caliphs, with chronology.—Arabic.

EXTRACTS

From letters, recently received, by Dr. Swift, of the Naval Hospital, at New-York, from a correspondent at Tunis.

"TUNIS, 24th December, 1835.

* * * * * * *

"We have, as yet, thank God, escaped the cholera, although it has been in our neighborhood. The Bey has, at length, been induced to solicit the consuls to form themselves into a sanatory Board, and to establish such regulations as are best calculated to secure the country against the introduction of disease. The plan of an extensive and very commodious Lazaretto has already been laid before the Board, and has been approved of, and arrangements are making for its immediate erection.

"Since the death of the late Bey Sidi Hassein, and the taking possession of the regency of Tripoli by the Sultan, great apprehensions have prevailed here, lest he might pursue a similar policy towards this regency, and the more so, as we were informed, from time to time, that a large expedition was fitting out, having Tunis for its destination. Sidi Mustafa, however, as I informed you in some of my former letters, lost no time in conciliating the good will of the Sultan, by despatching a frigate with his first minister, charged with *regalia*, worthy the acceptance of his Sublime Highness. It found favor in his sight, and met with a gracious acceptance. The minister was created a Bey, and his favorite an Agha, and both received the appropriate decorations in brilliants.

"To Sidi Mustafa, together with the firman creating him Pasha Bey, was sent, not the caftan as formerly, but a splendid uniform, with a large decoration in brilliants, and a sword also studded with valuable diamonds. The ceremony of investiture took place a few days since, which, for splendor, was unprecedented in Barbary. The whole of the regular military force of the regency, consisting of four regiments, each being furnished with a numerous and excellent band, were concentrated in the neighborhood of Bordo, where, un-

der the command of French officers, they have been exhibiting their truly surprising progress in European tactics.

"The Potomac, Capt. Nicholson, put in here, for a few hours, on the 3rd ult. The Captain, being bound to Gibraltar and Lisbon, desirous of avoiding a tedious quarantine, did not communicate with the shore—the officers were all well. Com. Elliot has gone to Smyrna, where, he informs me, he will spend the winter, and promises to pay me a visit with the squadron next summer. Barbary, I am aware, has but few attractions for our naval commanders, and I have seen but little of them of late. Fortunately, their presence is not necessary. With the Bey, and his ministers, I am on the very best terms.

"I did, for some time, anticipate the pleasure of having Com. Porter with me this winter. I had recommended this climate, as likely to effect a favorable change in his health, especially during the winter months, and he had promised me to come; but the season is so far advanced, that I presume he has abandoned the idea, at least for this winter.

"I am grateful to learn, that you will shortly have a respectable Hospital Establishment, which has long been a desideratum, not only at New-York, but at all the naval stations in the United States."

"TUNIS, 28th December, 1835.

* * * * * * * * *

"I wrote you a few days since, with the intention of sending my letter to Mr. Fitch, at Marseilles, but I received a note last evening from Mr. Gaspery, informing me that a vessel from Smyrna, bound direct to New-York, had put in on account of bad weather, and would sail again to-morrow. I therefore hasten to drop you a line, by an occasion as favorable as it is unusual.

"Another of my colleagues has been called to his account. Mr. Nyssen, the Dutch consul, died this morning of a protracted illness of many months. He will, most probably, be succeeded by his eldest son, who is now vice consul. Of those whom you knew, not one is now left. An entire

change has taken place, in the consular corps, within the last ten years. I think I mentioned, in one of my former letters, that a German prince, Puckler Muskau, of some literary celebrity, had made a tour through the most interesting parts of the Regency, with the view of publishing a work on it. It will shortly appear, in four volumes, embellished with drawings of some of the remains of temples, amphitheatres, aqueducts, &c. He is now at Athens, and after finishing his tour in Greece, goes to Egypt and Constantinople, and from thence to the United States, in favor of which he appears to be highly prepossessed. I had a letter from him, previous to his departure from Malta, in which he expresses a hope of meeting me, 'in my own glorious country on his arrival there.' His work on England, I presume, has been republished in New-York; if so, I beg you will request Mr. Hill to forward it, in the first box he sends me.

* * * * * * * * *

"I must thank you again, in the name of my family, for your kindness in furnishing us 'Letters from Constantinople by an American;' they have renewed our pleasures, and created a desire of repeating our visit to the shores of the beautiful Bosphorus.

"We have given up the idea of seeing Com. Porter here this winter. His health, I am happy to say, by the last accounts, had experienced a considerable improvement."

LETTER

From Commodore Patterson to the Corresponding Secretary of the Naval Lyceum.

U. S. Ship Delaware, Norfolk, Feb. 20th, 1836.

SIR,—Desirous to complete, as far as in my power, a collection of lavas for the Naval Lyceum, I wrote on the 6th of Feb., 1835, to J. L. Payson, Esq. our worthy consul at Messina, to procure for me specimens of the lavas and minerals of Sicily and the Lipari Islands. to which Mr. Payson replied, "June 12th, 1835—"

"I have taken the necessary steps to procure the specimens of lava from Etna, but it will require some time before a complete collection can be made. The Cavalier Erojeni of Catania is an honorary member of the Naval Lyceum and I have the promise of his assistance in perfecting the collection. Specimens of the mineral productions of Sicily, and the Lipari Islands are being prepared; although some time must elapse, before they can be completed, I shall take care that they are sent by the first opportunity."

And again on "Aug. 11th—"

"This will be presented you, by the Commander of the Shark, who has charge of three boxes of specimens of lava, marked 1, 2, and 3.

"No. 1. Contains thirty-three specimens of the eruption of Nov., 1832, territory of La Musa, near to Bronti, of which twenty are crystalized, and have one side polished.

"No. 2. Contains one hundred and eighty specimens—one side of each polished.

"No. 3. Contains one hundred and thirty-one specimens: of which there are thirty-two, with one side polished, and the rest in the rough state.

"Each specimen in cases No. 2, and 3, has on the paper which covers it, the name of the place from whence it came.

"Every possible attention has been given, in the selection, of these specimens, which will no doubt be found complete, in every respect.

"May I take the liberty of requesting you to present this collection, in my name, to the Naval Lyceum.

"I shall shortly receive a farther collection, from the Lipari Islands, which will be forwarded by the earliest opportunity.

J. L. Payson."

I have not opened the cases, or seen any of the specimens, but am quite sure they will be found valuable, and complete, more so than any collection that has been made, for very many years, in Sicily. Mr. Payson has, by his liberality, deprived me of the pleasure of presenting these to the Lyceum; but my object is effected by his doing it, and I hope the compliment will be acknowledged to him, as to

him belongs the merit. He will be found a most valuable correspondent, and friend of the Lyceum.

I have collected some minerals, shells, and fossil remains for the Lyceum, which I will forward as early as time will permit. A friend at Cairo took the trouble to extract from the pits at Sakara some earthen pots, containing mummies of the "Ibyss," which he shipped, as I had requested, to Marseilles. They had been so roughly handled there, that when they reached me, both boxes and pots were broken, and the mummies had disappeared; a circumstance I regret, as they must have lain in the pits some four thousand years. I have written to Cairo requesting others, and that they may be sent to Malta, and thence to me.

When at the pyramids of Gizeh, I examined two very fine and perfect Sarcophagi of Egyptian basalt, near to the great Sphinx, and requested my friend to endeavor to procure one of them for me, to present the Lyceum—this, however, he was unable to effect, as they belonged to an European who had excavated them.

I have seeds from Upper and Lower Egypt, Syria, Sicily, Naples, Gibraltar, and Medina. Should the Lyceum wish any, they will with pleasure be sent.

Very respectfully your obedient servant, &c. &c.

DANIEL T. PATTERSON.

C. O. HANDY, Esq. &c. &c. &c.

EXTRACT OF A LETTER

Received by JOHN BOYLE, Esq. Chief Clerk of the Navy Department, dated on board the United States flag-ship Peacock, Bombay, Nov. 9th, 1835, published to correct erroneous statements, which represent the ship as having been totally lost.

MY DEAR SIR,—We have at length arrived at this place, and I avail myself of the departure to-morrow of the steamboat for Egypt, via the Red Sea, to drop you a line by the way of England.

We left Zanzibar on the 8th of September, steering our

course across the Arabian Sea for Muscat, at the entrance of the Persian Gulf. On the night of Sunday, the 21st, a fresh breeze blowing from the southwest, the ship having studding sails set—and ploughing her way at the rate of eight miles per hour—suddenly struck on a bed of coral rocks. It would hardly be possible to describe the surprise which ensued. Those who were below, in bed, came immediately on deck; not to inquire the cause of this sudden shock—for the repeated thumps, at every rise and depression of the sea, too plainly spoke it—but only to ask the question, reiterated from all sides, "Where are we?" "What rocks can these be?" All, however, were satisfied as to our dismal situation; breakers were foaming round; the rocks alongside were within two and a half fathoms of the surface; and the ship lay "hard and fast."

All sail had been at once taken in, and the necessary orders, for getting out the boats, were promptly obeyed. Provisions and various other articles were thrown over, and the water, excepting a few hundred gallons, was started in the hold and pumped out, in order to lighten the ship. She remained, however, immovable, at times, striking hard. Anchors and kedges were sent out; but the crew toiled, in vain, at the capstan. A boat had been sent to sound around, when the deepest water, for a considerable distance, was found to be three and a half and four fathoms, about two hundred yards southwest of the ship. The yards, topmasts, &c. were lowered, in order to ease the ship; and though every thing was done, which prudence could suggest, in such a situation, all seemed without effect.

It was not possible to form any accurate opinion as to the nature of the spot where we were. Some supposed we might have run upon some isolated rock in the ocean, not laid down on the charts; others thought we might be, on the coast of Arabia Felix, swept from our true course, by a mighty current. Nothing, however, remained now to be done but to wait patiently for daylight, in the hope of seeing land, which, as yet, could in no direction be discovered. The anxiety of this interval may, perhaps, be readily imagined. The dawn discovered to our view a low, sandy island, about

a mile distant, which seemed totally destitute of vegetation, or any signs of being inhabited. No other land was visible around. It was conjectured, that this small island might be that of *Mazeira*, on the coast of *Arabia Felix*, but that it must be very erroneously laid down on the charts, or that an extraordinary current, or defective chronometers, had led us far from our proper course.

The most unceasing efforts were made, during the day, to haul the ship off. It was resolved to lighten her, by every possible means, even to the cutting away of the masts, should this, at last, be found necessary. Several tons' weight of shot, with cables, and every article that could be readily removed, were thrown over; a raft was constructed alongside, on which the provisions, &c. were stowed. But the utmost efforts to remove the ship from the spot—where she seemed jammed among the rocks—sometimes striking heavily—proved unavailing, and the leak which had commenced, was hourly increasing.

On Tuesday morning, a boat was despatched to Muscat, distant between 2 and 300 miles, with the view of obtaining assistance. Edmund Roberts, Esq. accompanied Passed-Midshipman W. R. Taylor with eight men in this—taking on board six or eight days' provisions, quadrant, chart, &c. In the meantime, the natives of the coast, discovering our distressed situation, gathered round us in their large dows,* robbed our raft, and annoyed our boats, when out on duty. A few well directed shot from a nine-pounder, however, intimidated, and kept them thereafter at some distance, where they were content to remain, and watch the ravages of the elements upon us.

Happily, after 61 hours of unremitted toil and anxiety, and lightening the ship by throwing over 11 of our guns, we succeeded, on Wednesday afternoon, in hauling her off the rocks into a depth, where, thus lightened, she floated; and immediately setting sail, beat her off the shore, with a fine stiff breeze, through a shallow and dangerous passage among the rocks. Standing off 15 or 20 miles—the island

* A *dow* is a boat with latteen sails, used in that country.

we had just left bearing nearly west—we discovered also, to our surprise, high land, bearing *east*, and now ascertained, for the first time, that we were behind the island of Mazeira, i. e. in the passage between it and the main land. This channel abounds in rocks and reefs, and has been the scene of numberless disasters in ancient and in modern times. The following day, Thursday, we beat out the south end of this passage, and doubling the southern extremity of Mazeira, which is a hilly and extensive island, stood on our course for Muscat.

On Monday, the 28th, we fell in with the Sultan's sloop of war *Sultana*, bound for Mazeira, to our assistance, and having Mr. Taylor on board, who had arrived safe with the boat, on the afternoon of the Saturday, following the Tuesday, on which they left us. On the 29th, we anchored in the harbor of Muscat, the Sultana in company.

Much praise and gratitude are due to the Sultan, for his extraordinary kindness, and the very prompt assistance which he has despatched to us, on this occasion. On hearing from Mr. Roberts the nature of our misfortune, he immediately offered the use of one of his frigates to carry the officers and crew of the Peacock to the United States, if necessary ; and to Mr. R. another, in which to prosecute his voyage, and accomplish the objects of his mission.

Fortunately, however, we were saved from the extreme necessity of throwing ourselves thus far, on his generosity. Our ship having been in dock here, (from which she came out yesterday,) has had all her copper renewed, a new false keel fitted, and all the other requisite repairs, which will, no doubt, now render her perfectly competent to continue the cruise.

At Muscat, the Sultan gave to the Commodore and his officers a splendid dinner at the palace, served up entirely in the oriental style. He has caused frequent presents of fresh meat and vegetables to be sent to the ship ; and at Zanzibar, a valuable port of his dominions, the ship was entirely supplied, by his order, free of charge during the time she remained there.

The crew has been very healthy. There is nothing of the cholera at present in Bombay."

ABSTRACT OF THE TREATY WITH SIAM.

Department of State, March 9, 1836.

Information has been received at this department of the exchange of ratifications of the treaty with the Sultan of Muscat, on the 30th of September last, by the agent of this government sent out for that purpose. The treaty is considered by the Sultan as having gone into effect on the 30th of June, 1834, the day on which the consent of the Senate of the United States was given to its ratification; and all duties or other charges which have been exacted of American vessels in the dominions of the Sultan since the last mentioned date, beyond those stipulated for in the said treaty, will be returned to the persons by whom they were paid, upon application being made to the government of the Sultan. The original treaty, to which the ratification of the President was annexed, having been taken by the agent for the purpose of being exchanged, and the one received in return not having yet reached the department, it cannot be officially promulgated; but in the mean time the following abstract of its contents may be found useful to the mercantile community.

Abstract of the treaty with Siam.

The citizens of the United States are permitted to enter and depart from any port of the kingdom with cargoes of whatever description, and to buy, sell, and exchange, without qualification or restriction, except that they are not to sell munitions of war to any other person than the King, or to import opium, or export rice. The only charge to be exacted from American vessels, is a measurement duty of 1,700 ticals or bats for every fathom of 78 American inches, in breadth upon ships selling merchandise, and of 1,500 ticals or bats per fathom on those purchasing cargoes with specie; the measurement to be made in the middle of the vessel's length, upon the single deck, or if there be more than one deck, then upon the lower one; but no charge is to be made

upon a vessel entering merely to refit, or for refreshment, or to inquire the state of the market. In case of a reduction of the duties upon the vessels of any foreign nation, the same reduction is to be made in favor of those of the United States.

American debtors, who shall have honestly brought forward and sold all their property for the payment of their debts, are not to be proceeded against for the balance remaining due, after the application of the proceeds of such sale. Merchants trading to Siam shall obey the laws and customs of the country; and if they wish to rent houses they shall rent the King's factories, and pay the customary rent therefor. The King's officers may take account of goods brought on shore, but no duty shall be levied thereon.

In case of shipwreck of an American vessel on the Siamese coast, the persons escaping shall be hospitably entertained, and the property saved shall be restored to the owners; and if a vessel of the United States shall be captured by pirates, and brought into a Siamese port, the persons on board shall be set at liberty, and the property restored to the rightful proprietors.

If the privilege shall hereafter be granted to any foreign nation, other than the Portuguese, to have consuls resident in the kingdom, the same privilege shall be extended to the United States.—*Globe.*

DOUBLE FLINT LOCK.

The National Intelligencer, of the 22nd of March, contains a notice and short description of "a double flint lock" for muskets or other fire arms, as an invention of Lieut. U. P. Levy of the U. S. Navy. Without any information as to the claims of Mr. Levy to originality in the case, simple justice to a distinguished officer of the British Army, Major Gen. Sir Howard Douglas, requires us to state, that we have always understood the invention of the double flint lock to be rightly ascribed to him. A description of it may be found in the excellent work of that officer on "Naval Gunnery," Part IV. Section 165, page 206.

METEOROLOGICAL OBSERVATIONS FOR THE MONTH OF FEBRUARY, 1836.

Made at the U. S. Naval Hospital, N. Y. Station. Longitude 74° W. Latitude 40° 42′ N. Variation 4° 26′ W. WILLIAM SWIFT, M. D., Surgeon.

Moon	DAY OF THE		THERMOMETER			BAROMETER			WIND						WEATHER			RAIN	REMARKS
									DIRECTION			FORCE							
	Mth.	Week	7 A. M.	Noon	7 P. M.	7 A. M.	Noon	7 P. M.	7 A. M.	Noon	7 P. M.	7 A. M.	Noon	7 P. M.	7 A. M.	Noon	7 P. M.		
	1	M.	19	16	11	29.48	29.54	29.63	N. W.	N. W.	N. W.	strong	fresh	fresh	cloudy	fair	fair		Feb. 7 Slight fall of snow in the morning, and snow 3 inches in the night.
	2	T.	0	6	6	29.77	29.78	29.78	N. W.	W.	W.	fresh	fresh	fresh	fair	fair	fair		8 Began to blow hard at 7 o'clock P. M from N. W.
	3	W.	0	12	9	29.88	29.88	29.87	W.	W.	W.	mod.	mod.	mod.	fair	fair	fair		12 Snow, 1 inch.
	4	T.	10	22	9	29.88	29.95	29.98	N. W.	N. N. W.	N. N. W.	light	mod.	mod.	cloudy	fair	fair		15 Snow, 1-2 inch
	5	F.	—6	6	8	30.04	30.07	30.02	N. W.	N. N. W.	N. W.	mod.	mod.	mod.	fair	fair	fair		17. Snow, 5 in Cleared off at 8 P. M.
	6	S.	0	14	12	30.11	30.17	30.17	N. W.	W. S. W.	S. W.	mod.	mod.	mod.	fair	fair	fair		19. Snow, 2 in. Cleared off at 2 P. M
	7	C.	12	26	24	30.23	30.20	30.16	N. E.	N. E.	N. E.	light	light	light	cloudy	cloudy	snow		24. Commenced in the night a heavy gale. Ceased on the 25th in the E.
	8	M.	30	33	32	29.71	29.54	29.48	N.	N. E.	N. W.	mod.	light	mod.	rain	cloudy	cloudy	.10	26. Began to snow about 7 1-2 A. M. Cleared off at 6 P. M Snow, 5 in.
	9	T.	22	33	34	29.58	29.73	29.72	N. W.	S. W.	S. W.	light	light	light	fair	fair	clear		29. Commenced snowing about 9 A. M. Ceased at 3 P. M. Commenced raining about 4 P. M.
	10	W.	27	32	29	29.92	30.02	30.04	N. W.	W.	W.	light	light	light	cloudy	fair	fair		Fair days, 12; rain on 4; snow on 7.
	11	T.	17	34	26	30.34	30.41	30.38	N. W.	N. N. E.	S. W.	light	light	light	fair	fair	fair		Prevailing winds, N. E and N. W.
	12	F.	23	32	25	30.39	30 34	30.25	N. E.	N. E.	N. E.	light	light	light	snow	cloudy	cloudy		Quantity of rain, 1 35 inches
	13	S.	31	45	34	29.95	29.87	29.81	N. E.	S. W.	W.	light	light	light	rain	rain	cloudy	.50	Quantity of snow, 18 1-2 inches.
	14	C.	26	29	18	29.75	29.75	29.77	N. W.	N. W.	N. W.	mod.	strong	strong	clear	fair	fair		The mercury in the thermometer stood at zero, at sunrise, on the 2d, 3d, and 6th; and at 6 degrees below zero, at the same hour on the 5th.
	15	M.	7	30	22	29.76	29.63	29.52	S. W.	S. S. W.	N. W.	fresh	light	light	clear	cloudy	snow		
	16	T.	16	21	16	29.79	29.93	29.97	N. W.	N. W.	N. W.	mod.	light	light	fair	fair	clear		**RESULT.**
	17	W.	13	26	14	29.98	29.94	29.97	N. E.	N. E.	N. E.	light	light	light	snow	snow	snow		THERMOMETER.
	18	T.	3	18	8	30.25	30.31	30.31	N.	N. W.	N. W.	light	light	light	fair	fair	fair		Mean temperature for the month - - 22°
	19	F.	3	24	18	30.30	30.30	30.29	N. W.	N. E.	N. E.	light	light	light	cloudy	snow	fair		Highest ditto, on 21st and 23d at noon 49
	20	S.	23	38	30	30.12	30.07	30.03	N. E.	N. E.	N.	light	light	light	cloudy	drizzly	foggy		Lowest ditto, on the 5th at sunrise —6
	21	C.	30	49	32	29 88	29.93	29.89	N. E.	N. W.	N.	light	light	light	cloudy	cloudy	fair		Greatest daily variation, on the 15th 23
	22	M.	27	42	34	29.92	29.97	29.93	N.	N. W.	S. W.	light	light	light	fair	fair	fair		Least ditto, on the 8th - - - - - - 3
	23	T.	28	49	36	30.00	30.02	29.97	N. E.	N. E.	N. E.	light	light	light	fair	cloudy	cloudy		Range - - - - - - - - - - - 55
	24	W.	32	41	36	29.93	29.70	29.45	N. E.	N. E.	N. E.	light	light	light	foggy	rain	rain	0	BAROMETER. Inches.
	25	T.	29	32	26	29.48	29.58	29.93	N. W.	W. N. W.	N. W.	strong	strong	fresh	fair	fair	fair		Mean atmospheric pressure for the month - - - - - - - - - - 29.974
	26	F.	20	22	16	29.97	29.83	29.65	N. W.	N. E.	N. E.	light	light	light	cloudy	snow	snow		Highest ditto, on the 28th, at noon 30.530
	27	S.	12	29	19	30.02	30.10	30.16	N. W.	S. W.	S. W.	light	light	light	fair	fair	fair		Lowest ditto, on the 24th, at sunset 29.450
	28	C.	16	34	20	30.40	30.53	30.52	S. W.	N. E.	N. E.	light	light	light	fair	hazy	cloudy		Greatest daily variation, on the 24th, .480
	29	M.	14	24	28	30.46	30.33	30.08	N. E.	N. E.	N. E.	light	mod.	light	cloudy	snow	rain	.25	Least ditto, on the 3d and 19th - - .010
																			Range - - - - - - - - - - - 1.080
																			The barometer is elevated about fifty feet above the level of the sea.
																			The thermometer is exposed at the northern end of the building.
																			The rain-guage is elevated five feet above the surface of the earth.
																			The thermometer and barometer were manufactured by Pike & Sons, New-York.

NAVAL INTELLIGENCE.

The U. S. Ship Vincennes, commanded by Master Commandant John H. Aulick, was at Tahiti, September 9th, 1835. She had arrived on the 5th of that month, from Nukahiva, one of the Washington group or Northern Marquesas, in the Pacific.

Nothing worthy of note had occurred, since they parted from the Brandywine, Commodore Wadsworth, in July last, at Callao; had taken twelve American seamen on board, at Tahiti, principally left there by whalers, and expected others before sailing.

The Vincennes was to sail the next day for the Friendly and Fejee groups, touching at some of the intermediate islands—next to the Pelew islands, and from thence to China, where they expected to arrive by the 1st of January, 1836.

All on board were in good health.

The U. S. Frigate Brandywine, Commodore Wadsworth and schooners Dolphin and Boxer, were at Callao on the 23rd of Nov. 1835—the Boxer to sail for Panama, in a few days.

The U. S. Ship Peacock, and Schooner Enterprise, under command of Com. Kennedy, were at Bombay on the 16th Nov. 1835. Officers and crews well. Not a single death had occurred in the squadron, since sailing from the United States.

U. S. squadron in the Mediterranean, under the command of Com. Elliot, were at Tangier, on the 4th of February.

U. S. Sloop John Adams, Capt. Stringham, was at Teneriffe, at the last dates from her.

Commodore Renshaw, Commander-in-Chief of the U. S. Naval Force on the Brazilian station, was at Buenos Ayres on the 4th of January.

U. S. Ship Ontario, Capt. Salter, from Monte Video bound to Buenos Ayres, was in the river, on the 28th of January.

The Frigate Constellation was at Pensacola, on the 12th

of March. The Sloop of war St. Louis, Capt. Rosseau, arrived off the bar, at the S. W. Pass of the mouth of the Mississippi, on the 15th of the same month; but being unable, from the low state of the water, to go up to New-Orleans, proceeded on a cruise to the westward.

The U. S. Sloop Warren sailed from Pensacola, on the 12th of March, on a cruise along the Florida Coast to Key West.

The Sloop of war Concord, Capt. Mix, arrived off Havana from Portsmouth, N. H., on the 17th of March, and sailed on the 19th for Pensacola.

The Sloop of war Vandalia, was at Tampa Bay, on the 5th of February.

It is stated, by the Army and Naval Chronicle, that the Frigate Columbia, launched at the Navy Yard at Washington on the 11th of March, is soon to be fitted out, as the flag ship of the Brazilian squadron.

Commodore Patterson has entered upon the duties of the command, at the Navy Yard at Washington.

Captain Jesse Wilkinson, it is stated, is to have command of the Frigate United States, fitting for sea at New-York, destined, as is supposed, for the Mediterranean.

Mr. Southard, of N. J., introduced a bill to the U. S. Senate, on the 21st inst., to provide for an exploring expedition to the Pacific Ocean and South Seas, which was read, and passed to a second reading.

The direction of the Coast Survey has been transferred to the Treasury Department, to which it was, in the first instance, confined. It remains under the superintendence of Mr. Hassler. Lieut. T. R. Gedney is under orders for duty on the Survey, as Commander of the U. S. Schooner Jersey. The following Passed Midshipmen have been ordered to assist him:—Alberto Griffith, Geo. N. Hawkins, Franklin Clinton, Geo. J. Wyche, Levin Handy, B. F. Sands, John Rodgers, Octavius Fairfax, John L. Ring, and Richard W. Meade.

The U. S. Marine Corps have presented Col. Henderson, their Commandant, with a splendid sword cane, made from a piece of the original timber of the Cyane, recently

broken up in Philadelphia. Col. Henderson was in command of the Marines, on board the Frigate Constitution, with the gallant Stewart, when he captured the Cyane and Levant, in the late war with Great Britain.

The Legislature of Virginia unanimously adopted a resolution, on the 5th inst., requesting the Governor to present to Captain E. A. F. Valette, of the U. S. Navy—a citizen of Virginia—a sword, to be ornamented with suitable devices, emblematic of the Battle of Lake Champlain, as a testimonial of the high regard of his native State, for the gallantry and distinguished patriotism displayed by him, on that occasion. Captain Valette has just returned from a long cruise in the Pacific, in command of the U. S. Sloop Fairfield.

A Board for the examination of Midshipmen, whose warrants bear date prior to the 1st of January, 1831, will be convened at Baltimore, on Monday, the 16th day of May next. This Board will be composed of Commodore James Biddle, as President; and Captains H. E. Ballard, J. B. Nicolson, A. Claxton, and L. Kearney, as members. Professors E. C. Ward, and P. J. Rodriquez, to be the Mathematical Examiners.

PROMOTIONS IN THE U. S. NAVY.

Master Commandant Thomas Holdup Stevens, to be Captain, from 27th of January, 1836.

Lieutenants Samuel L. Breese and Benjamin Page, Jr., to be Master Commandants, from the 22d of Dec., 1835.

Passed Assistant Surgeon Mifflin Coulter, to be Surgeon, from 22d Dec., 1835.

RESIGNATIONS IN THE U. S. NAVY.

Midshipmen Charles Sperry, and W. T. Cocke, in March, 1836.

DEATHS IN THE U. S. NAVY.

Lieut. John T. Jenkins, at New-York, Feb. 6th, 1836.

Purser William M'Murtrie, at Philadelphia, March 24th, 1836.

OBITUARY.

Died, on board the U. S. Ship-of-the-line Delaware, off the Capes of Virginia, on the 15th of February, in the 23d year of her age, HARRIET L. PATTERSON, eldest daughter of Commodore D. T. Patterson, of the U. S. Navy.

When inserting, in the pages of the last number of the Naval Magazine, a description of the "Harem of Egypt," from the pen of Miss Patterson, we little dreamed of the melancholy interest with which the sketch was soon to be invested, by the announcement of the death of the youthful and accomplished writer. She was pictured in our imagination at the time, only such as we had parted from her, in the Mediterranean, a few brief months previous, in the full enjoyment of health—lovely in person and manners, and winning, from all who approached her, a lasting sentiment of admiration and esteem. We thought of her, too, as hastening to her country and her home, with all the warm affections of an ingenuous heart—there to become, from her beauty and elegant acquirements, and the varied advantages of wide-extended observation and travel, a conspicuous ornament of the most cultivated and polished circles of society.

But, she was landed a lifeless corpse! and the only halls of her reception were the cold chambers of the tomb! How melancholy the truth, to those who knew and loved her, if this were all that could be told: and how happy—how glorious to them the persuasion, that "THOUGH DEAD SHE YET LIVETH." More than a year previous to her death, while yet in the enjoyment of her usual health, and surrounded by the fascinations of the world, in many of their most alluring forms, she yielded her heart to the impressions and influences of piety, and became, as is confidently believed, an humble and sincere follower of Him who died that sinners might live. Having thus, while "the evil days were not yet come," chosen "that good part which shall never be taken from her," she died "the death of the righteous," and will, doubtless, with the spirits of the just made perfect, shine in the kingdom of Heaven, like a star in the firmament, FOR EVER AND EVER!